S. Hrg. 101-1099, Pt. 3

Senate Hearings

Before the Committee on Appropriations

Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations

Fiscal Year 1991

101st CONGRESS, SECOND SESSION

H.R. 5158

PART 3 (Pages 1–362)

NONDEPARTMENTAL WITNESSES

5181-15

S. Hrg. 101-1099, Pt. 3

DEPARTMENTS OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT, AND INDEPENDENT AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1991

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

SECOND SESSION

ON

H.R. 5158

AN ACT MAKING APPROPRIATIONS FOR THE DEPARTMENTS OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT, AND FOR SUNDRY INDEPENDENT AGENCIES, BOARDS, COMMISSIONS, CORPORATIONS, AND OFFICES FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1991, AND FOR OTHER PURPOSES

PART 3 (Pages 1–362)

Nondepartmental Witnesses

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DEPARTMENTS OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT AND INDEPENDENT AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1991

TUESDAY, MAY 15, 1990

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10 a.m., in room SD-138, Dirksen Senate Office Building, Hon. Charles E. Grassley presiding.

Present: Senators Mikulski and Grassley.

NONDEPARTMENTAL WITNESSES

HEARING PROCEDURE

Senator GRASSLEY. The subcommittee will come to order. Today we will hear testimony from congressional and outside witnesses regarding the proposed budget for EPA, as well as other agencies under the subcommittee's jurisdiction.

Due to the large number of witnesses testifying over the next few days, each witness is limited to 2½ minutes, and I ask that you respect the time limit so that everyone may be heard.

Keep in mind that your entire record or statement will be printed in the record. Witnesses will be called up in panels. When your panel is called, each of the witnesses may approach the witness table together. The yellow light will come on when you have 1 minute left. When the red light comes on, we will to move on to the next witness.

Our first panel will include Father George and Father Collins from Georgetown University, Mr. Ernest Shea of the National Association of Conservation Districts, Mr. Edward Kress of Kress Corp., Mr. Charles Johnson of the American Waterworks Association.

We'll start with Father George and Father Collins.

NATIONAL SCIENCE FOUNDATION

STATEMENTS OF:

REV. BYRON T. COLLINS, ASSISTANT TO THE PRESIDENT, GEORGETOWN UNIVERSITY

REV. WILLIAM L. GEORGE, ASSISTANT TO THE PRESIDENT, GEORGETOWN UNIVERSITY

Father **Collins**. Senator Grassley, I'm Father Collins. I'm supporting the request of the President for the National Science Foundation in association with all the other Jesuit colleges and universities.

Father **George**. Mr. Chairman, members of the committee and staff, I'm Father William George, assistant to the president of Georgetown.

I'd like to ask the committee to consider a unique relationship between Georgetown University Medical Center and the DC VA Hospital and their research staff. The DC VA, and Georgetown have had a relationship for over 40 years. They have some superb—some of the country's best medical researchers at the VA.

They're constrained by both lack of facilities and spending too much time in the clinical area where they're not able to do the research that they wish they could. So we'd like to ask the committee to consider that.

I thank you, Senator Grassley, for your attention.

Senator **Grassley**. Thank you very much.

[The statement follows:]

Joint Statement of Fr. William L. George and Fr. T. Byron Collins

Senator Chairperson, we are Fr. William L. George, S.J., and Fr. T. Byron Collins, S.J., assistants to the President of Georgetown University.

Georgetown University requests support for each of the two fiscal years 1991 and 1992 in addition to the regular appropriations for the VA to permit its Medical Center to complete a multi-million dollar state-of-the art Research Building and to enable DC VA Medical Staff to participate in collaborative research and clinical activities with the Georgetown medical faculty in critical health problems facing American veterans, including: cancer, heart and lung disease, diseases of the liver and gastrointestinal tract, AIDS, diseases of the prostate gland and such psychiatric and neurological disorders as Alzheimer's Disease, and problems of drug abuse.

The DC VA Medical Center has been affiliated with Georgetown University Medical Center for four decades, both in teaching and research. The close proximity of the VA, Georgetown and the NIH in the Washington area has enabled these three major institutions to engage in many collaborative programs. However, in recent years the VA Medical Center has been under increasing pressure to render clinical services to its patient population with reduced staff. This has resulted in severely limiting the time and opportunities for the very talented VA medical staff, many of whom have made significant research contributions to their field, to engage in collaborative research with Georgetown and the NIH. The collaborative program should enhance recruitment and retention of DC VA Medical Staff.

Georgetown is planning the design and construction of a $41 million research facility for which partial support is requested from the VA Appropriations in each of the fiscal years 1991 and 1992. The building will provide Georgetown and VA staff the optimum research environment in which to undertake basic research. Each year additional funds are necessary to promote collaborative activities between the VA medical staff and Georgetown, and to construct and equip an inpatient clinical research unit for collaborative activities at the VA. VA medical staff would also apply jointly with Georgetown faculty for competitive research funding.

On behalf of our President, Rev. Leo J. O'Donovan, S.J., we thank you for consideration of this urgent request.

Environmental Protection Agency

STATEMENT OF ERNEST C. SHEA, EXECUTIVE VICE PRESIDENT, NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS

Senator **Grassley**. Thank you very much. Mr. Shea?

Mr. **Shea**. Thank you very much, Senator. My name is Ernie Shea and I am executive vice president of the National Association of Conservation Districts. We represent the local conservation districts throughout the country, 3,000 special-purpose units of government that coordinate and carry out natural resource management programs.

Included with our testimony is a list of recommendations for several EPA programs dealing with nonpoint source pollution. Our main reason for appearing today is actually twofold.

First is to thank the committee for providing 319 funding last year. The $40 million that was made available certainly helped get that program off the ground. Second, we'd like to emphasize the importance of providing the full funding that's authorized under Federal statutes, the Clean Water Act, which is $100 million.

NONPOINT SOURCE POLLUTION

Nonpoint source pollution is not a new problem. It's a problem that has been well documented. Although it's complex and pervasive, it's a problem for which solutions do exist. We know how to solve nonpoint source pollution.

Working with landowners to apply best management practices, you can bring about substantial improvements in water quality by protecting these nonpoint—by correcting these nonpoint problems.

The quandary that we're facing right now is simply that there's not enough money to fund the programs that have been put into place. States do not have the resources they need to fund their 319 programs that they've put into place. Although they've put a tremendous amount of resources into these programs, without a strong Federal commitment there will not be enough combined resources to operate them effectively and really improve water quality to the point that we're trying to achieve with the Clean Water Act.

So, for that reason, we're here to say we've got a good vehicle; we've got a good strategy; we need the fuel to make the vehicle run.

Thank you.

Senator GRASSLEY. Thank you, Mr. Shea.

[The statement follows:]

STATEMENT OF ERNEST SHEA

Mr. Chairman, members of the subcommittee, my name is Ernest Shea and I am Executive Vice President for the National Association of Conservation Districts. I appreciate the opportunity to testify today in support of federal appropriations for EPA's nonpoint source pollution abatement programs.

The following chart lists several of the EPA programs which relate to nonpoint source pollution control. NACD's recommended funding level for each is included.

ENVIRONMENTAL PROTECTION AGENCY NONPOINT SOURCE PROGRAMS

Program	FY90 FINAL APPROPRIATION	FY91 ADMINISTRATION PROPOSAL	FY91 NACD RECOMMENDED
	(In Millions)		
Water Quality Management (205j)	10.3	0	18.0
Clean Lakes Program	8.7	0	15.0
State Programs Grant (Sec. 106	72.6	81.7	75.0
Sec. 319 NPS Grants	38.9	14.3	100.0
Sec. 205 (j) (5)	10.3	0	18.0
Section 118 Great Lakes Phosphorus Reduction	12.2	12.2	21.5

All of these programs represent components of EPA's national strategy to combat nonpoint source pollution.

Our association represents nearly 3,000 local conservation districts in this country and the more than 15,000 men and women who serve on their governing boards. Conservation districts are independent units of state government that are charged with coordinating and carrying out comprehensive, local natural resource management programs including forest and rangeland management, wetland protection and enhancement, agricultural and urban erosion and sediment control, wildlife and fish habitat management, and nonpoint source pollution abatement.

Pollution from nonpoint sources is an immensely complex issue which will require an extensive and coordinated federal, state, and local effort to resolve. The 1987 amendments to the Clean Water Act set forth the framework to addressing these problems in just such a manner. The Act directed the Environmental Protection Agency to work with states to assess their nonpoint problems and develop management programs to address them. The Act also authorized appropriations of $400 million in federal funds - with a 40% required state match - to develop and implement these programs over a four-year period.

Every state and jurisdiction in the nation has now developed its nonpoint management program and many have begun to implement them. The quandary we are in right now, however, is that states alone do not have the resources to carry out their programs fully. Nonetheless, states are doing what they can and have, in fact, made substantial progress in their efforts. For example, this year, through state conservation agencies and conservation districts, thirty-one states are providing some type of financial assistance to land users to help them address natural resource management problems. While almost all of these state-funded assistance programs have some positive impact on water quality, twenty-three are focused directly on agricultural nonpoint source pollution. These twenty-three state programs will provide over $130 million in cost share and other financial assistance to help land users install best management practices to mitigate agricultural nonpoint pollution. This total does not include technical assistance provided by states and districts to help install those practices.

In addition, I have also included with this statement a copy of the proceedings of a national conference on nonpoint source pollution sponsored by NACD a year ago. The case studies presented in the proceedings document some of the work already being carried out by state and local governments. Much of the policy discussion emphasizes the need to do more.

We were pleased this past year when Congress took the first step toward fulfilling its commitment of providing financial assistance to state nonpoint management programs. The $40 million appropriated for Section 319 in FY-1990 marked an important beginning in bringing together a fully coordinated federal-state-local nonpoint source pollution control endeavor. These funds, allocated primarily to highly targeted, priority watershed projects, are, however, only a small beginning. Far more support is needed to get the job done.

For these reasons, NACD urges this committee to provide full funding in the amount of $100 million for implementing Section 319 of the 1987 Water Quality Act. Even though this amount will not match the states' efforts, it will allow those states without ongoing programs an opportunity to begin. It will also complement and greatly strengthen existing state efforts. It would further send a strong signal to states and to the American public that the federal government is poised to move forward in protecting the nation's water resources.

In other areas involving nonpoint source pollution control, NACD recommends funding the Great Lakes Program (Section 118) at $21.5 million. This program has been instrumental in enhancing the water quality in the Great Lakes by reducing phosphorus loadings through the application of soil conservation and erosion control measures in the Lakes Basin. Other regional initiatives, although not specifically noted in our chart but which merit the attention of this committee, include noteworthy efforts such as the Chesapeake Bay and Puget Sound Programs and the emerging Gulf of Mexico initiative.

In closing, I would like to call your attention to the other EPA programs for which we have provided FY-1991 funding recommendations. Each of these programs represents an important element in our regional or national nonpoint source pollution control paradigm. I urge this committee's members to examine each of these items with great care.

The nonpoint source pollution problems we face pose a serious challenge. With federal resources to complement those of state and local government, we in the conservation district community are confident that we can deliver effective solutions.

Thank you for allowing us to share our views with you on this important subject.

STATEMENT OF EDWARD KRESS, PRESIDENT, KRESS CORP.

Senator **Grassley**. Mr. Kress?

Mr. **Kress**. Thank you for again allowing me to appear before you.

I'm Edward Kress, president of the Kress Corp. in Brimfield, IL, near Peoria.

Senator **Grassley**. Would you move the microphone over, please?

Mr. **Kress**. Do you want me to start again?

Senator **Grassley**. Yes.

Mr. **Kress**. OK. Thank you for again allowing me to appear before you.

I'm Edward Kress of the Kress Corp. near Brimfield, IL, near Peoria. The company was founded in 1965 and we employ 150 people.

KRESS INDIRECT DRY COOLING SYSTEM

We design and manufacture specialized mobile equipment for the steel mill, mining, and earth-moving industry. Most often our design approaches are completely unique. This is especially true for our Kress indirect dry cooling system [KIDC], which is now being installed for the first two at two coke oven batteries at Bethlehem Steel's Sparrow Point plant.

Coke ovens drive the volatile matter out of coal so that the coke, which is almost pure carbon, can be used as both a fuel and a reducing agent in blast furnaces to make iron. Coke ovens are the most environmentally troublesome process in the steel industry and the most troublesome process in coke ovens are the pushing and quenching emissions.

Push emissions are regulated but the solutions are costly and ineffective. Quenching emissions are not regulated and there is no economically feasible solution. The KIDC system addresses both effectively with an added advantage of producing more and better coke.

Congress has appropriated $2.5 million for fiscal 1990 to initiate a 30/70 Government/industry cost-sharing project. The total Federal cost-sharing is anticipated to be $6 million with $3.5 million to be, hopefully, appropriated for fiscal 1991.

EPA and Bethlehem are working together to sign a contract in June. As the project is underway, precontract costs are allowed by the EPA. All permanent structures are complete or near completion at Sparrows Point. Evaluation of the system is planned to start on August 1.

When this technology is proven, it can potentially be installed in many domestic coke ovens, as well as coke ovens throughout the world. This technology, we believe and have been told by many, is by far the most environmentally sound available as well as being energy- and cost-effective.

In conclusion, we request that the project receive the final funding in the amount of $2.5 (sic) million for fiscal 1991 to complete the originally anticipated participation of $6 million by the Government.

Thank you. We appreciate your time.

Senator **Grassley**. Thank you.

[The statement follows:]

STATEMENT OF EDWARD KRESS

Madam Chair and members of the Sub-Committee -- Thank you for allowing me to again appear before you. My name is Edward Kress and I am President of the Kress Corporation located in Brimfield, Illinois, just outside of Peoria. The Kress Corporation specializes in the design, engineering, and fabrication of material handling equipment for use in industries such as steel, mining, and earthmoving. Our Corporation has been in existence since 1965 and employs 120 people. Over the years, we have developed innovative equipment for the markets we serve.

One innovative system, currently under development, is the KIDC^R or the Kress Indirect Dry Cooling System. The first installation of this system will be on two coke oven batteries at Bethlehem Steel Corporation's Sparrows Point Plant. Specifically, KIDC is an environmentally advanced system which effectively eliminates all pushing and quenching emissions from the coking process. For those not familiar with the steelmaking process - coking is a step in the production cycle which converts bituminous coal into coke for use in the blast furnace as both a fuel and a reducing agent.

With Congressional and national attention focused on amendments to the Clean Air Act, this new system represents an opportunity to address a segment of the most environmentally troubling process in the steelmaking production cycle. Clearly, the demonstration of this advanced coke pushing emissions control system at this time is highly appropriate.

Since this system has the potential to significantly reduce particulate matter emissions, Congress appropriated $2.5 million for fiscal year 1990 to initiate a government/industry project to demonstrate the system. Joint participation will significantly help to launch this system and permit faster commercialization. The project is to be cost shared at an approximate 30% Federal, 70% industry rate. The total Federal cost share is anticipated to be $6 million -- with $3.5 million being appropriated in fiscal year 1991.

EPA and Bethlehem are both working diligently to sign a contract by June, 1990. There are no major obstacles or outstanding issues delaying negotiations -- rather it is the normal procurement process which has precluded an earlier signing. As the project is already underway, pre-contract costs will be allowed by EPA - a not untypical situation.

The project is basically on schedule. All of the permanent structures are completed or nearing completion. The mobile equipment is not currently on site but will be tested in our shop rather than on site. This should not, however, alter the basic project schedule.

If the technology proves successful, there is the potential for it to be installed at a number of domestic coke oven operations located in approximately 12 states -- the largest concentration being in Indiana, Ohio, Pennsylvania and Alabama. This technology, we believe, is the next generation of pushing and quenching emission control systems which combine environmental, energy, and operating benefits.

In conclusion, we request that this project receive final funding in the amount of $3.5 million for Fiscal Year 1991 to complete the originally anticipated participation of $6 million by the government.

Thank you for your attention and if there are any questions, I will gladly answer them.

STATEMENT OF CHARLES C. JOHNSON, JR., AMERICAN WATER WORKS ASSOCIATION

Senator GRASSLEY. Mr. Johnson.

Mr. JOHNSON. Thank you, Mr. Chairman.

I'm Charles C. Johnson, Jr. I represent the American Water Works Association. The association is a 109-year old scientific/educational one. We have more than 50,000 members throughout the world and it's the largest of its kind in the world.

We represent the professionals in the water industry— the drinking water industry. This is operators, engineers, contractors, scientists, educators, manufacturers, health regulators, and the like. Over 3,500 utilities are members of our association. They produce 75 percent of all the Nation's drinking water.

I, myself, have been in the environmental activities area for more than 40 years. I'm a retired Assistant Surgeon General of the Public Health Service. I was Chairman of the National Drinking Water Advisory Council from its inception for the ensuing 6 years. I'm currently president of the firm C.C. Johnson & Malhotra of Silver Spring, MD.

I'm also from Iowa, Mr. Chairman.

Senator GRASSLEY. Congratulations. No wonder you're been so successful. [Laughter.]

SAFE WATER ESSENTIAL

Mr. JOHNSON. AWWA believes that few environmental activities are more important to the Nation's health than protection of its water supply sources and the treatment, distribution, and consumption of safe water. The Congress is to be congratulated for passing legislation that provides a basis for helping to make this possible.

We have some concerns, however, Mr. Chairman. The well-founded effort to implement the National Drinking Water Program may fall short of its goal, due to the lack of funding. Our testimony calls your attention to five specific activities that illustrate the basis for this concern. I'm going to try to touch on each of these very briefly. All of them are substantially underfunded.

We have the State program assistance activity. And the basic Drinking Water legislation authorizes the Federal Government to provide up to 75 percent of the funds that the States need to implement this program. Currently, the Federal funds make up 32 percent of the moneys being spent, which is $95 million. These funds fall far short of the necessary $180,000 (sic) that the EPA estimates will be required to implement new standards under the act.

We must recognize that if the states don't do the job, the Federal Government is supposed to take over and do the job. And we have to ask ourselves where, then, will the Federal Government get these funds? Are they going to be just as short and fail just as much as the States? I don't see any other alternative. If the Federal Government can get the moneys, why can't they make them possible to the—make them possible for the States to do that job.

They have the experience, the knowledge, and the organizational entities to do, I believe, a far better job than the Federal Government could gear up to do. We recommend and support substantially increased funding of the State program assistance activities, accompanied by Government oversight attitude that recognizes maximum effort, commensurate with utilization of resources that are made available.

Senator **Grassley**. Thank you. We'll have to knock off because, otherwise, we've got so many panels. Thank you very much, Mr. Johnson.

Mr. **Johnson**. Thank you.

Senator **Grassley**. And thank each of you on the panel.

[The statement follows:]

STATEMENT OF CHARLES C. JOHNSON, JR.

Good morning Madam Chair, members of the Subcommittee, my name is Charles C. Johnson. I am testifying on behalf of the American Water Works Association (AWWA), a 109-year-old scientific and educational association and the largest association in the world representing professionals working in the drinking water industry. Our 50,000 members are comprised of administrators, utility operators, professional engineers, contractors, manufacturers, scientists, professors and health regulators. Our membership includes over 3,500 utilities which supply 75 percent of the nation's drinking water.

My career spans more than 40 years in environmental activities. I am a retired Assistant Surgeon General of the USPHS, and former Administrator of the Environmental Health Service. Currently I am President of C. C. Johnson & Malhotra, P. C., a Consulting Engineering Firm in Silver Spring, Maryland. Within the AWWA, I serve on its Strategic Planning Committee.

We believe few environmental activities are more important to the health of this country than assuring the protection of water supply sources, and the treatment, distribution and consumption of a safe and healthful supply of drinking water. We hope that you will be open to our funding recommendations and consider allocation shifts in EPA's programs so as to provide at least part of the increases requested in the drinking water program that has been severely underfunded over the years.

Background: The Safe Drinking Water Act

The American Water Works Association is committed to protecting both the environment and the public health. It is in this spirit that we support full implementation of the Safe Drinking Water Act (SDWA) to assure that public water supplies are free of contaminants that may cause health risks.

We ask that you provide the Office of Drinking Water sufficient funds for full implementation of the current and pending SDWA regulations. The 1986 SDWA Amendments set Drinking Water Program authorization levels at $170 million in FY87, $145 million in FY88, and $169 million annually in FY89, FY90 and FY91. Unfortunately, SDWA appropriations have never come close to these authorization levels ($103 million in FY87, $107 million in FY88, $108 million in FY89, $121 million in FY90 and $133 million requested for FY91). After next year's reauthorization, there will be an even greater need for funding well beyond what the state agencies should now be receiving.

For fiscal year 1991, the 10 percent proposed increase for EPA's drinking water program would result in an extra $12 million for a total budget of $133 million. However, the bulk of this "extra" $12 million goes to increase state program grants, while funding for the equally important rural water training and technical assistance programs would be reduced by 79 percent.

We request that EPA be provided the following appropriations:

State Program Assistance

ASDWA, the Association of State Drinking Water Administrators, has testified in recent years that of the $95 million currently spent by state drinking water programs, $64 million, or 68 percent, is committed by state legislators through direct appropriations or various drinking water program fees and revenue production measures. EPA funds the remaining amount, approximately $31 million or 32 percent, in annual program grants.

Despite this Federal/State funding imbalance, EPA asserts in its Drinking Water Program request that the states must do even more in coming years to meet the new challenges of the Safe Drinking Water Act Amendments. According to EPA, the states will need to spend an additional $180 million through 1992 for start-up costs to implement new drinking water standards and $150 million annually thereafter to comply with the regulations.

We agree with EPA that the states are the responsible party for carrying out Federal drinking water mandates. The states possess the expertise, particularly in the areas of sampling and testing for small systems. After Indiana assumes primacy in 1991, Wyoming will stand alone as the only state without PRIMACY. Unfortunately, the states are not the governmental entities with the resources to dedicate an extra $180 million in FY92 and $150 million in following years.

EPA describes fiscal year 1991 as a "turning point" for state drinking water programs. Confronting implementation of the first major risk - reduction provisions, the states will begin to enforce new monitoring requirements affecting all 200,000 plus public water systems. Again, AWWA agrees with the magnitude of this challenge as stated by EPA. We do not, however, share EPA's view that the states will be able to totally fund this effort.

As a minimum, AWWA requests a $10 million increase over the Administration's request for state grants. To equitably increase Federal responsibility and offset inflation and previous funding shortfalls, we support ASDWA's request that Federal grants increase from current funding levels to approximately 93.45 million by fiscal year 1992. ASDWA and AWWA recommend an increase of $19.5 million in fiscal year 1991 above the Administration's request and an additional increase of $26.5 million in fiscal year 1992. This would result in the Federal share rising from its current level of 32 percent of total funding to approximately 50 percent. The original Safe Drinking Water Act authorizes the Federal government to provide up to 75 percent of the costs of the states' drinking water programs. Contrary to EPA's assertion that the states need to do more, it is clear that the states have historically shouldered the largest portion of the funding burden.

Madam Chair, we recognize the pressure you and your Subcommittee face in trying to fund the ever-increasing number of federal mandates against trillion dollar deficits. However, we respectfully submit to you that the Drinking Water Program has borne its brunt of deficit reduction over the years, and we hope you will make this program a top Federal spending priority within EPA.

Training and Technical Assistance to Small Water Systems

To further support state PRIMACY activities and provide insurance for the safety of the nation's public water supplies, AWWA requests the fullest possible funding of the $10 million authorized under Section 1442(g) of the 1986 Safe Drinking Water Act Amendments for small system technical assistance. These funds are needed in addition to state grants and must not be provided at the expense of other existing drinking water grant programs.

Last year this Subcommittee appropriated for FY90 the largest single increase (from $2.7 million to $3.3 million) in the rural water training and technical assistance program. This was money well spent, as the National Rural Water Association provides technical assistance to 8,500 small community systems participating in the program. This program is essential to bring small systems into compliance with the Safe Drinking Water Act. If the public is asked to spend billions of dollars on protecting drinking water supplies, proper operation of these public water supplies must be guaranteed through adequately trained operators and technical assistance programs that give hands on help to small systems. The water industry must continue to ensure high quality drinking water to all people with adequate funding support for grass roots technical assistance.

Technical training and educational assistance will require pulling together all the fragmented efforts at the state level to ensure availability of state-of-the-art instructional materials. AWWA is currently working with the State Administrators and Rural Water Systems to establish a program to meet these training and educational challenges. We plan to support a funding request that may be placed before this Subcommittee at this time next year.

Research and Development

Under the Administration's request, EPA's drinking water research budget would increase a modest $1.1 million from FY90 levels. Of all the research media programs scheduled for increase in EPA's Research and Development budget, drinking water comes in the lowest at 5 percent. In view of the extensive basic health effects research required by the Safe Drinking Water Act, we believe that a funding level above what is proposed in the Administration's request needs to be dedicated specifically for this purpose.

Our affiliate organization, the American Water Works Association Research Foundation, runs an outstanding voluntarily funded R & D program. But they have all they can handle with applied and technical research to help utilities implement the regulations. In our opinion, basic health effects research belongs with the Federal government, and more federal funding needs to be appropriated. Regulations to protect public health from individual contaminants in drinking water must be based on sound science, which can only be assured by adequate research. Without sound science, we cannot be sure that the highest priority contaminants are being regulated.

Lead

Last year in conference committee this Subcommittee retained $3 million for lead-based paint studies and support, but dropped $10 million for public water system state grants to reduce lead exposure to children from school fountains and other high risk sources. This greatly concerned us, especially since no funds were appropriated the previous fiscal year for the Lead Contamination Control Act of 1988.

The 1988 lead law authorizes $90 million over three years at $30 million a year for grants to states to help schools identify and eliminate lead from their drinking water. An additional $66 million is authorized over the three years for state grants to local programs to screen children for elevated levels of lead in their blood.

We urge the fullest possible funding for this vital program, which is now in its final year of authorization. Our nation's school systems cannot implement this vital program without funding support.

Groundwater Protection

The water industry believes that protection of groundwater resources through state wellhead protection programs is an important step in protecting public health. AWWA fully supports EPA's current efforts to implement Section 1428 of the Safe Drinking Water Act and an appropriation of funds to the states under Section 1443(b). Federal support is needed if state wellhead protection programs are to be successful across the nation. Some 30 states have now submitted wellhead protection programs to EPA for review and approval, and it is likely that more states will apply for assistance should grant funds for wellhead protection be approved.

The Administration requests $10.5 million for groundwater protection, a $2 million increase over last year's request. Since this program establishes an important role for the Federal government in groundwater protection, we ask that you provide these funds and appropriate monies at or near the $20 million annual authorization level for the wellhead protection program.

This concludes our funding request for FY 1991. We urge you to increase the Office of Drinking Water's budget and provide the requested funding levels for the programs discussed. Full implementation of Federal mandates will continue to depend on whether there is adequate Federal money to provide leadership and incentive for state participation.

Thank you for this opportunity to present our views. I would be happy to address any questions or comments that you may have.

Senator **Grassley**. I'll call the next panel: Sister Lourdes Sheehan of the United States Catholic Conference; Thomas M. Keinath, Association of Environmental Engineering Professors; Brian Burns, National Rural Water Association; Steven Aust, Association of University Environmental Health Sciences Center; and Mike Ellis, National Utility Contractors Association.

We'll start with Sister Lourdes Sheehan.

STATEMENT OF SISTER LOURDES SHEEHAN, SECRETARY OF EDUCATION, UNITED STATES CATHOLIC CONFERENCE

SCHOOL ASBESTOS HAZARDS

Sister **Sheehan**. Thank you, Mr. Chairman.

I'm Sister Lourdes Sheehan, secretary for education for the United States Catholic Conference.

Today I speak on behalf of the 2.2 million children who attend the 8,800 elementary and secondary Catholic schools in this country, as well as for the millions of parents and others who support them.

My statement today is to urge this subcommittee to provide $125 million in the 1991 (sic) Appropriations Act for the Asbestos School Hazard Abatement Act. This funding is necessary to assist schools to abate asbestos hazards, which are seriously endangering our Nation's children.

If Congress considered it a national priority to abate asbestos hazards in schools, then it should also consider it a national priority to provide the necessary resources to assist the schools in complying with the Asbestos Hazard Emergency Response Act. The original ASHAA authorization and subsequent appropriations has proven to be insufficient to address the enormity of the asbestos problems in schools. Congress has provided less than $50 million per annum over the past 7 years. This $350 million is totally inadequate.

SURVEY SHOWS DOUBLED COST

We have done a survey of Catholic schools in the United States and estimate that the real projected cost in the Nation's schools will double the amount projected by EPA. In other words, if Catholic schools that we have surveyed fulfill their management plans, we estimate that the cost will be $430 million.

Congress has imposed a tremendous financial burden on our Nation's schools. It is incumbent that the same legislative body provide adequate financial assistance to enable them to meet their statutory obligations in this regard. Therefore, we urge this subcommittee to respond to the size of the asbestos hazard problem in the schools by fully funding ASHAA at its authorized level of $125 million for fiscal year 1991.

We respectfully request that this statement be included in the record of the hearings.

Thank you.

Senator **Grassley**. It will be.

[The statement follows:]

STATEMENT OF SR. LOURDES SHEEHAN

Madam Chairman, I am Sr. Lourdes Sheehan, Secretary of Education for the United States Catholic Conference. I speak today on behalf of 2,2551,119 children who attend the 8,867 elementary and secondary Catholic schools in this country as well as for the millions of parents and others who support them. My statement today is to urge that these current hearings and decisions on the 1991 Appropriations Act provide $125 million for Title V -Asbestos School Hazard Abatement Act of 1984 of P.L. 98-377, the Education for Economic Security Act of 1984. This level of funding is an absolute minimum necessary to assist elementary and secondary schools in abating asbestos hazards which are seriously endangering our nation's school children.

In 1982, the Environmental Protection Agency issued the "Friable Asbestos-Containing Materials in Schools Identification and Notification Rule" (40 CFR Part 763) promulgated under the Toxic Substances Control Act. This rule required all schools to: inspect, sample, and analyze friable asbestos materials; document and maintain records; and notify employees, students and parents of such hazards. In the absence of any federal financial assistance and with minimal training, most school officials made every good faith effort to comply with these regulations. However, both Congress and the EPA were dissatisfied when surveys revealed that about 30% of all schools had not complied with the Asbestos-in-Schools Rules.

The Asbestos School Hazard Abatement Act was passed in 1984 because Congress determined that the presence in school buildings of friable or easily damaged asbestos created an unwarranted hazard to the health of school chidren and employees who are exposed to these materials. The Act established an Environmental Protection Agency Program of interest free loans and grants of up to 50% percent of the abatement cost to assist schools to comply with the Asbestos-in-Schools Rules. Congress authorized $50 million for FY 1984 and 1985 and $100 million per annum for the subsequent five years to assist schools to abate asbestos health hazards.

Two years later, in 1986, Congress reemphasized its concern about exposure to asbestos hazards in schools and enacted the Asbestos Hazard Emergency Response Act. This statute required the nations's public and private schools to inspect buildings for all asbestos containing materials, develop and implement plans for the operation, maintenance and repair of such materials, and to take corrective response actions necessary to protect human health and the environment from asbestos hazards. All of these activities were required to be performed by state certified personnel. Schools were also required to provide training to custodial staff regarding the proper handling and maintenance of asbestos materials. These requirements have placed a heavy finanical burden on our nation's schools. Unfortunately, Congress did not authorize any funding to assist schools to comply with the requirements of AHERA. Apparently it was thought that the funding provided under ASHAA, in 1984, was sufficient to address the schools' asbestos problems. If Congress considers it a national priority to abate asbestos hazards in schools then it should also consider it a national priority to provide the necessary resources to assist all schools in complying with the Asbestos Hazard Emergency Response Act.

The ASHAA authorization and appropriations have proven to be inadequate to address the enormity of the asbestos problems in schools. Congress has provided less than $50 million per annum over the past seven years and even this amount has been reduced each year by the Gramm, Rudman, Hollings Budget Reduction requirements. Three hundred and fifty million over a seven year period is totally inadequate to address this problem.

The Environmental Protection Agency, in implementing the compliance requirements of AHERA, has projected that approximately 106,983 elementary and secondary schools nationwide will be affected. EPA has also projected that the potential estimated cost to schools for addressing the specific requirements of AHERA to be the following:

Total cost $3.145 billion

1. Inspections and sampling	$78.5 million
2. Development/Implementation of Management Plans	$1.27 million
3. Periodic Surveillance	$47.7 million
4. Reinspection	$23.2 million
5. Special Operations and Maintenance	$292.7 million
6. Abatement Response Actions	$1.43 billion [1]

Information which we have gathered through a survey of the 176 Catholic dioceses nationwide shows that EPA's estimated cost projections are extremely low and that the real projected cost to the nation's schools will be approximately twice that amount.

We base our projections on the actual cost of inspections and management plan development in 6626 Catholic elementary and secondary schools. Our survey (See Attachment A) indicates the following projected costs for abatement activities in those same schools:

Inspections	$7,051,991	
Management Plan Development	$32,034,705	
Projected cost of Abatement Activities		$390,782,519
Grand Total of Real and Projected Costs		$429,869,143

If these 6626 Catholic schools from 105 dioceses in 44 states and the District of Columbia can be regarded as a microcosm of the 106,983 elementary and secondary schools nationwide, the total cost to our nation's schools to comply with the requirements of AHERA would be $6,938,087,968 or more than twice the amount projected by the Environmental Protection Agency. This figure also closely corresponds to the estimate of $6 billion in a report released by the National School Boards Association in July, 1989.

The financial cost to the nation's schools to meet the requirements of AHERA are staggering beyond belief and fall upon poor, rural, inner city, and middle class suburban schools without exception. The public school community may meet some of the costs of these requirements by raising local or state tax levies or by floating local bond issues. Private and parochial schools must raise these funds as best they can by school "fund raising" activities or by borrowing from local lending institutions at premium rates of interest which further compounds their financial problems. Regardless of the source of these public and private school funds, they are resources which can best be used to enhance the education of our nation's school children.

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[1] Federal Register/Vol. 52, No. 210/Friday, October 30, 1987, Page 4185

Congress in enacting the Asbestos Emergency Response Act has imposed a tremendous financial burden on our nation's schools. It is incumbent, then, that this same legislative body provide adequate financial assistance to schools to enable them to meet their statutory obligations in this regard.

We urge this subcommittee to respond to the size of the asbestos hazard problem in our nation's schools by fully funding ASHAA at its authorized level of $125 million for FY'91.

Madam Chairman, we respectfully request that our statement be included in the record of hearings on the FY'91 Appropriations Act.

Diocesan-Wide Asbestos Cost Assessment

State # of Schools	Inspections	Planning	Abatement
Alabama			
24 Birmingham	28,000	12,000	1, million
Alaska			
2 Fairbanks	75,000	75,000	100,000
Arizona			
28 Phoenix	37,747	37,747	1,603,839
24 Tucson	16,000	11,000	305,000
Arkansas			
24 Little Rock	39,677.58	39,677.59	6,240,150
California			
266 Los Angeles	250,000	250,000	6 million
48 Sacramento	42,117.13	42,117.13	539,627
50 San Diego	35,000	25,000	1,650,000
86 San Francisco	250,000	250,000	1 million
14 Stockton	22,100	36,350	98,331
Colorado			
37 Denver	87,000	88,000	2.8 million
Connecticut			
55 Bridgeport			1.2 million
26 Norwich			4 million
Total #669	**844,894**	**4,924,289**	**21,433,108**

State **# of Schools**	**Inspections**	**Planning**	**Abatement**
Delaware			
36 Wilmington			8 million
District of Columbia			
108 Washington	85,903	73,608	1 million
Florida			
66 Miami			5.7 million
29 Orlando			1.5 million
19 Palm Beach	12,410	14,000	1.8 million
17 St. Augustine			500,000
33 St.Petersburg			438,000
Georgia			
16 Atlanta			2.5 million
18 Savannah	4,905	15,312	550,000
Idaho			
13 Boise	12,542.47	12,542.47	412,712
Illinois			
48 Belleville	156,268	78,134	4,176,707
393 Chicago	705,501	15,852,220	198,698,596
67 Joliet	125,000	125,000	10 million
Indiana			
30 Evansville	38,000	38,000	3.5 million
46 Ft. Wayne-So. Bend			2 million
Total #939	**1,140,529**	**16,280,816**	**61,947,278**

State # of Schools	**Inspections**	**Planning**	**Abatement**
Iowa			
57 Dubuque	52,000	52,000	3,746,000
42 Sioux City	23,080	4,200	2.5 million
Kentucky			
41 Covington			1.2 million
26 Owensboro	13,682	13,682	400,000
Louisiana			
15 Houma-Thibodaux	10,599	10,599	400,000
36 Lafayette	16,317	23,500	NA
100 New Orleans	116,200	116,200	3,506,800
Maine			
24 Portland	36,791.85	9,600	7,235,796
Maryland			
101 Baltimore	165,000	110,000	1.6 million
Massachusetts			
192 Boston			25 million
28 Fall River			2.5. million
Michigan			
194 Detroit			10 million
17 Gaylord			445,000
48 Grand Rapids	56,519	53,241	43,998
23 Kalamazoo			800,000
47 Lansing	60,231	60,232	3,335,000
34 Saginaw	91,900	52,000	1,674,000
Total #1025	**642,319**	**5,653,254**	**71,586,594**

State **# of schools**	**Inspections**	**Planning**	**Abatement**
Minnesota			
39 St. Cloud	44,512.98	45,479.09	90,836
122 St. Paul			10 million
30 Winona	29,109	48,609	1,640,193
Mississippi			
23 Jackson	17,678	17,688	NA
Missouri			
208 St. Louis			65 million
26 Springfield- Cape Girardeau	4,730.04	4,730.04	1,972,112
Montana			
26 Helena	7,500	6,325	200,000
15 Great Falls-Billings	32,500	32,500	12,000
Nebraska			
29 Lincoln	16,255	16,255	431,563
81 Omaha			1.8 million
New Jersey			
74 Camden			7 million
50 Metuchen	125,000	100,000	7.5 million
212 Newark	175,500	461,130	2.8 million
79 Paterson	188,000	140,350	2.5 million
Total #994	**640,785**	**732,716**	**100,946,704**

State # of Schools	**Inspections**	**Planning**	**Abatement**
New York			
8 Dioceses	3,292,060 Inspections and Planning		
57 Albany			1,281,540
166 Brooklyn			17,487,440
137 Buffalo			4,860,450
321 New York			13,836,480
28 Ogdensburg			886,550
77 Rochester			746,760
103 Rockville Centre			3,487,320
64 Syracuse			407,280
North Carolina			
15 Charlotte	66,000	53,412	1,594,303
North Dakota			
20 Bismarck	15,700	15,700	637,300
17 Fargo	59,032	683,222	987,300
Ohio			
138 Cincinnati	175,000	175,000	3 million
182 Cleveland	206,608	206,608	2 million
63 Columbus	43,200	56,800	4 million
60 Youngstown	32,000	33,000	5 million
Oklahoma			
18 Oklahoma City	5,614.33	10,426.60	NA
15 Tulsa	36,320	1,800	300,000
Total #1481	**2,285,504**	**2,881,998**	**60,512,723**

State # of schools	Inspections	Planning	Abatement
Oregon			
50 Portland			3.5 million
Pennsylvania			
69 Allentown	71,500	71,500	350,000
54 Erie	60,161	60,161	14,941,819
62 Greensburg	94,739	18,000	5.5 million
62 Harrisburg	67,500	67,500	2.5. million
315 Philadelphia			1.3. million
153 Pittsburgh	3,176	1,750	969,150
70 Scranton	69,200	30,000	2.8 million
Rhode Island			
77 Providence	240,000	273,000	359,000
South Carolina			
30 Charleston	28,661	28,660	665,588
South Dakota			
32 Sioux Falls & Rapid City			1,238,912
Tennessee			
22 Memphis			2.6 million
Total #996	**634,937**	**550,571**	**36,724,469**

State # of Schools	Inspections	Planning	Abatement
Texas			
9 Amarillo	103,016	103,017	8,000
19 Austin			2.5 million
29 Corpus Christi	62,775	125,550	750,000
35 Dallas	50,000	50,000	6.9 million
17 Forth Worth			500,000
Utah			
12 Salt Lake City			100,000
Virginia			
33 Arlington	400,000	400,000	5 million
35 Richmond			3 million
Washington			
62 Seattle	50,000	100,000	13 million
18 Spokane	10,700	2,500	106,000
7 Yakima	14,080	8,400	65,200
West Virginia			
40 Wheeling Charleston	6,390.45	116,118.48	496,847
Wisconsin			
94 Green Bay	86,911	50,833	865,437
86 La Crosse	33,000	33,000	50,000
19 Superior	30,079	43,643	790,159
Wyoming			
7 Cheyenne	16,000	50,000	NA
Total #550	**900,698**	**1,120,808**	**35,735,482**
		GRAND TOTAL	
#6654	**7,089,666**	**32,072,452**	**391,386,358**

STATEMENT OF THOMAS M. KEINATH, ASSOCIATION OF ENVIRONMENTAL ENGINEERING PROFESSORS

Senator **Grassley**. Mr. Keinath? And if I didn't pronounce your name right, you can correct me.

Mr. **Keinath**. It's Keinath.

Thank you, Mr. Chairman.

EPA OFFICE OF RESEARCH AND DEVELOPMENT

As president of the Association of Environmental Engineering Professors, I represent faculty at approximately 100 universities throughout the United States. I wish to represent AEEP's views concerning the budget for the Environmental Protection Agency's Office of Research and Development.

During the decade of the 1980's, major legislative initiatives substantially increased EPA's regulatory responsibilities. Coincidentally, the environmental problems facing society continued to expand in scope, magnitude and complexity. To ensure an ecologically healthy environment for future generations, in view of an ever-increasing milieu of chemicals and environmental contaminants, it is critical that EPA once again exert itself as a science agency, in addition to fulfilling its regulatory mission.

EPA is the agency which must assume the leadership role in ensuring that the requisite long-term basic research is, in fact, conducted. In this context, it was most gratifying to review EPA's recent report, which is entitled, "Protecting the Environment: A Research Strategy for the 1990's." The core research initiatives outlined in that document truly are visionary and begin to address the long-term basic research needs so effectively identified by EPA's Science Advisory Board.

By significantly expanding to develop the scientific and technological knowledge base required to prevent pollution and protect and enhance our environment, we also achieve a very important secondary goal—that of solving a critical human resource crisis by materially increasing the production of trained scientists, engineers dedicated to environmental research, protection, and restoration.

To conclude then, long-term basic research will lead to the development of scientific assessments and technological advances that will provide for the restoration and protection of this country's environment and will save the United States countless sums in doing so. It is essential that Congress be supportive of the EPA's research initiatives. The subcommittee support of EPA's ORD budget is critical and is urged.

Thank you for giving me the opportunity to present this testimony.

Senator **Grassley**. Mr. Burns?

STATEMENT OF BRIAN BURNS, NATIONAL RURAL WATER ASSOCIATION

RURAL WATER SYSTEMS

Mr. **Burns**. Thank you very much, Mr. Chairman.

My name is Brian Burns and I'm the program manager for the Northeast Rural Water Association, which serves Vermont, New

Hampshire, and Massachusetts. I'm here on behalf of the National Rural Water Association to thank you and this committee for the support it's given the Rural Water Training and Technical Assistance Program in the last year and to request your continued support for the program in the Environmental Protection Agency budget of fiscal year 1991.

With your permission, I'd like to submit the written testimony for the record and briefly highlight this testimony.

The National Rural Water Association is a federation of State rural water associations, such as the Northeast Rural Water Association and the Iowa Rural Water Association. It's our objective to work together to improve the operation of the rural water systems and the delivery of drinking water to the rural areas, particularly to be sure that the rural water meets the ever-increasing testing and water quality requirements of the Safe Drinking Water Act.

Our program is unique in that it is the rural water systems themselves who have assumed the responsibility for working together to meet the Safe Drinking Water Act. The hands-on, grassroots approach makes the EPA Safe Drinking Water Act a program that has a uniquely high level of support and acceptance in the rural areas.

I mention this uniqueness of the program because the Safe Drinking Water Act has become an onerous and difficult Federal regulatory initiative for the small rural water systems. Two-thirds of the people that live below the poverty levels in this country live in the rural areas and they find it difficult to spend money on maintenance for something they can't see.

In the Northeast, as in the rest of the country, more than 95 percent of the systems have less than 500 connections; 88 percent of the systems have less than 200 connections. And almost all of these systems have untrained, volunteer operators. As you can imagine, while they make up only 10 percent of the users, they create 98 percent of the violations.

Many of the operators get the job because they're simply the last person to move into the neighborhood and they're well-meaning citizens that needs training and direction. These volunteers are expected to understand and assume the same responsibilities under the Safe Water Drinking Act that every other system, no matter what size it is.

We are also asking the committee to consider an additional request this year. There is an extensive debate over the threat of the Nation's ground water, particularly those aquifers in rural areas. Small drinking water systems share this concern, but also believe that actions speak louder than words. While the ground water debate continues in Washington and in State governments, we would like to start a program to initiate specific ground water protection plans for rural water systems throughout the country.

The best way to protect ground water is to start planning for its protection at the lowest levels of government, the small communities.

Thank you very much for your past help and your consideration in the future. And we hope that you'll consider these programs.

Thank you.

[The statement follows:]

STATEMENT OF BRIAN BURNS

Mr. Chairman, my name is Brian Burns and I am Program Manager for the Northeast Rural Water Association which includes Vermont, New Hampshire and Massachusetts. I am here on behalf of the National Rural Water Association to thank you and this Committee for the support you gave the rural water training and technical assistance program last year and to request your continued support for the program in the Environmental Protection Agency FY 1991 budget.

Perhaps the most important issue that I would like to address today is to fully explain the breadth and scope of this program and its unique impact on small water supplies throughout the country. The National Rural Water Association is a federation of state rural water associations - one such association exists in each of your states. The state-wide membership of each association is comprised of small non-profit water systems and small towns. All members have water supply operations as their primary daily activity. Membership averages about 320 systems from all parts of each state. These are active members - who continuously participate in the training and technical assistance program in an effort to improve their water. With a significant turnover in water operators and board members, the need for training and technical assistance is continuous.

In any state when you work with 320 small communities and water districts you average at least three or four to a county. The systems are required to comply with increasingly complex federal water testing requirements and you have the ongoing problems of protecting water supplies and planning for future water capacity. But, and this is the most important point, you have all these systems working together to conduct a peer oriented grassroots assistance program that helps systems move into compliance with the Safe Drinking Water Act (SDWA). That is what the funds provided by this committee for this program are all about.

What this program represents is truly unique. It is run by the water systems themselves - if it is not relevant, useful or effective it is changed by each state rural water association. This Committee provides other funds for various types of environmental training and technical assistance efforts which are useful. However, in these other cases separate institutions operate programs to provide assistance to unrelated utilities. In rural water association programs it is the systems themselves determining the need and then taking responsibility for operating the program to meet that need. As a result, EPA, through this program, is truly at the grassroots level. In fact, we believe it is the only program where EPA has reached the grassroots in rural areas across this country.

This special network is operating where the most serious rural environmental problems now occur. Small rural systems are the primary Safe Drinking Water Act problem. EPA is implementing a list of 83 contaminants to be tested under the SDWA and has published initial regulations on contaminant levels for lead in drinking water, coliform monitoring and expanded water filtration requirements. The major brunt of the cost to meet these proposals is placed on small water systems. In anticipation of this and in cooperation with EPA, the NRWA state training and technical assistance programs have rapidly expanded their efforts to help rural systems understand changing federal requirements and work together to prepare them to comply with the new rules. We are the longest and broadest arm in EPA's outreach effort throughout the country.

Over the past few years, we have come to this Committee to request your support to continue this program. This year, the President's budget again contains a request for some funding for the program. Our request to this Committee and to EPA is based on three points:

1. The vast majority of SDWA noncompliance problems are with small systems.
2. A peer-oriented grassroots training and technical assistance program operated by the small systems, themselves, is the best way to bring most small systems into compliance. The National Rural Water Association, comprised of the state rural water associations, is the only organization of small water systems in the country.
3. That the EPA funding of this program is very cost effective and outreach efficient.

One very positive aspect of the program has been the interest in states and even EPA regional offices to expand the program in individual states when additional funds are available. For example, three additional Florida Rural Water Association in-the-field staff are paid for with state funds, Region VIII has funded an additional person in Utah and a number of states associations are using energy efficiency funds to help systems reduce water loss. All these efforts are interrelated with the EPA program funded by this Committee. In addition, a growing number of states are creating new grant and loan programs to finance rural water systems to assist in upgrading them to meet SDWA requirements. Again, it is this EPA funded program that has become a catalyst in state after state for innovative and broad ranging efforts to improve drinking water facilities.

The number of participants in the training sessions continues to increase as do the number of rural water systems actively participating in the overall state association programs. For example, in the 12 months from January 1, 1989 through December 31, 1989, state associations conducted 565 workshops and provided training for 27,894 rural water operators and other personnel representing 13,172 water systems nationwide. With the constant turnover of small system operators, the majority of those persons have never attended water systems training sessions. Over 7,378 technical assistance visits, including visits for serious compliance problems with the Safe Drinking Water Act, were also carried out and were normally the only hands-on assistance provided to these systems to help them meet the requirements of the Safe Drinking Water Act. Attached is a chart outlining state-by-state assistance visits over the past 12 months.

We are asking this Committee to consider an additional request this year. There is extensive debate over the threat to the nation's groundwater - particularly those aquifers in rural areas. Small water systems share this concern, but we also believe that action speaks louder than words. While the groundwater debate continues in Washington and in state governments, we would like to start a program to initiate specific groundwater protection plans for rural water systems throughout the country. The best way to protect groundwater is to start planning for its protection at the lowest level of government - those small communities operating drinking water systems.

Under a separate letter, we have submitted a detailed description of our proposal. The concept is to create a mirror image of the existing training and technical assistance program using an in-the-field person in each state and small training sessions to guide and assist each small community in developing a groundwater protection plan. The program would operate in all 50 states, would be closely coordinated with evolving state and federal groundwater policies and would initiate a bottom to top effort on groundwater problems that would substitute immediate action for the existing public debate over the issue. The request for funding is $3.5 million which would assure the operation of the program in every state in the country and the establishment of initial groundwater protection plans in most counties within three years.

Finally, as we have done in the past, we are asking you and the Committee to provide funding for our rural water training and technical assistance program. We would like to complete our expansion to all 50 states because we believe that our program will provide improved compliance with the new law in these states. To expand to all 50 states, it would require an increase from $3.3 million to $3.9 million next year.

Thank you very much for your past help and your consideration of our request.

TECHNICAL ASSISTANCE YEAR-TO-DATE TOTALS
JANUARY 1989 - DECEMBER 1989

	STATE	TA ON-SITE	Treatment/ Operations/ Maintenance	Management/ Finance	Other
	AL	171	168	2	1
	AR	192	120	72	0
	CO	125	52	34	39
	FL	187	41	9	137
	GA	163	142	13	8
	IA	152	92	10	50
	IL	180	128	49	3
	IN	224	207	17	0
	KS	173	37	52	84
	KY	356	207	69	80
	LA	236	158	66	12
	ME	173	24	57	92
	MN	240	125	57	58
	MO	270	81	176	13
	MS	295	242	35	18
	MT	342	246	54	42
	NC	132	106	22	4
	ND	155	77	73	5
	NE	229	95	36	98
	NM	240	132	71	37
	NY	145	89	29	27
	OH	249	158	45	46
	OK	388	334	10	44
	OR	179	70	21	88
	PA	98	42	33	23
	SC	225	98	77	50
	SD	145	72	33	40
	TN	296	77	43	176
	TX	115	21	72	22
	UT	172	123	37	12
	VA	326	149	79	98
	VT	274	241	4	29
	WI	238	148	28	62
	WV	293	130	153	10
Total:		7378	4232	1638	1508
Count:	34				

STATEMENT OF STEVEN D. AUST, DIRECTOR, BIOTECHNOLOGY CENTER, UTAH STATE UNIVERSITY

HAZARDOUS WASTE

Senator Grassley. Mr. Aust, is that it?

Dr. Aust. That's close. Dr. Aust. I'm from Utah State University. I'm pleased to testify on behalf of the National Institute of Environmental Health Sciences Superfund Basic Research Program.

It is generally recognized that our environment is threatened, both our environment and our health, through careless disposal of hazardous waste. Congress recognized that the success of the Superfund was contingent on having a strong science base and authorized university-based scientists to conduct the basic research require by EPA, private industry and citizens to quantify and manage the health and environmental problems associated with hazardous waste.

With this modest investment, 11 participating institutions have developed a productive and exciting group of almost 90 research studies. For example, at Utah State University, we are working on an entirely new biological method to degrade environmental pollutants. We discovered that white rot fungi, the organisms that can degrade wood, can also degrade a wide variety of organic chemicals.

These fungi degrade wood by a very unique enzyme mechanism. We therefore proposed, and subsequently demonstrated, that these fungi can degrade a wide variety of environmental pollutants, such as PCB's, DDT, creosote, coal tar, other pesticides, other chemicals, and even mixtures of chemicals. Our research program is designed to determine how this process may be used in the hazardous waste management field.

The other university programs I have listed in my written testimony.

The fiscal year 1991 budget request is very disappointing. Instead of capitalizing on the progress made to date, it calls for a $5 million reduction in research funding. Rather than expanding the program, with an increase in funds as originally recommended by Congress, it asks that vital research studies be curtailed. It forces dozens of scientists, who have concentrated their intellectual effort on solving problems faced by Government and industry in cleaning up Americans' hazardous waste mess, to find something else to do.

In practical terms, it means that graduate students and their professors who were asked to design 5-year studies that were to have produced experimental results and solid, peer-reviewed scientific data, to turn off their instruments, to stop work before the final results are in. The 1991 SARA authorizes $35 million for this program. NIEHS has received applications totaling $29 million that have been peer-reviewed and approved for funding.

I appreciate the difficulties imposed by the current fiscal restraints, but strongly urge you to consider increasing the request for the NIEHS program.

Thank you.

[The statement follows:]

STATEMENT OF STEVEN D. AUST

Good morning, Mr. Chairman and Members of the Committee. I am Dr. Steven D. Aust, Director of the Biotechnology Center at Utah State University. I am pleased to testify on behalf of the National Institute of Environmental Health Sciences Superfund Basic Research Program.

Community leaders, private citizens, and industry have come to recognize the fact that we have threatened both our environment and our health through the careless disposal of hazardous wastes. We are now faced with the problems of cleaning up the wastes that have been discarded into sites that threaten our water, food supply and air, and of identifying methods for waste disposal.

Citizens, government, and industry all have responsibility in pollution prevention and in safe disposal of hazardous waste. Government and industry must share the burden of cleaning up abandoned sites.

Scientists can help decision-makers (legislators and environmental protection officials) prevent environmental damage and remedy past mistakes by providing solid information on the risks to human health, to sensitive ecologic systems, and to natural resources. Scientists can also provide methods and techniques which can be used to limit/eliminate exposure. At present, there is too little data and insufficient technology available to cope with the problem.

Congress recognized that the success of Superfund was contingent on having a strong science base and authorized university-based scientists to conduct the basic research required to help EPA, private industry, and citizens to quantify and manage the health and environment problems associated with hazardous waste.

Congress envisioned a small but vital program, paid for with a very small share of the Trust Fund. The authority was to grow from $3.0 million in FY 1987 to $35 million in FY 1991. The appropriations have fallen short of the promise.

	FY 87	FY 88	FY 89	FY 90	FY 91
Authority	$3 M	$10 M	$20 M	$30 M	$35 M
Appropriation	$3 M	$5.9M	$11.9M	$16.9M	?

But with this modest investment, the 11 participating institutions have developed a productive and exciting group of almost 90 research studies. For example, at Utah State we are working on an entirely new biological method to degrade environmental pollutants. We discovered that the white rot fungi, the only organism that can degrade the structural component of wood, can also degrade a wide variety of organic chemicals. The fungi accomplish the degradation by a very unique enzyme mechanism. We therefore proposed and subsequently demonstrated that this same process can degrade chemicals like PCB, DDT and other pesticides, coal tar, creosote, and other chemicals and chemical mixtures. Our research program is designed to understand thoroughly this process and to determine how it may be used in hazardous waste management.

The other Universities supported by these funds and the major emphasis of their programs are as follows:

Massachusetts Institute of Technology: New technologies in analytical chemistry and genetics to determine which hazardous substances are responsible for genetic changes in humans.

Michigan State University and the University of Michigan: Research on the contamination of groundwater with volatile organic compounds from leaking waste storage sites.

New York University: Development of methods to detect and predict human exposure to chemicals.

Texas A & M: Biological assessment of hazardous organic chemicals.

University of California at Berkeley and San Francisco: Methods for characterizing chemical exposure in exposed human populations and for preventing adverse health effects.

University of California at Davis: Biomarkers for exposure to hazardous substances.

University of Cincinnati: Biodegradation of hazardous substances.

University of Washington: Development of biochemical markers for cells or tissues injured by toxic substances.

SUNY-Albany: Neurobehavioral measures in people exposed to PCBs and hydrogeology of migration of PCBs from dump sites.

University of Arizona: Migration and detoxification of contaminants in groundwater.

These projects are paying off. Researchers have developed a new method of reclaiming solvents from soil so that they can be recycled. Two major conferences have already been held: one on biomarkers of exposure and one on biodegradation of Hazardous Wastes, held at Utah State University on April 9-10, 1990. Two more on incineration and routes of exposure are planned for this year.

In addition, the NIEHS and its scientific advisors have identified a detailed list of information gaps and research needs that should be filled to improve the capability of the EPA to select and implement effective and permanent remedies at Superfund sites and to assure safe management of licensed RCRA disposal operations. The university research community is capable of filling these gaps in methods and technologies to detect hazardous substances, in advanced techniques for the detection, assessment, and evaluation of the effects on human health of hazardous substances, and in basic biological, chemical and physical methods to reduce the amount and toxicity of hazardous substances.

The FY 1991 budget request is disappointing. Instead of capitalizing on the progress made to date, it calls for a $5 million reduction in research funding. Rather than expanding the program with an increase of funds, it asks that vital research studies be curtailed. It forces dozens of scientists who have concentrated their intellectual efforts on solving the problems faced by government and industry in cleaning up America's hazardous waste mess to find something else to do. In practical terms it means that graduate students and their professors who were asked to design 5 year studies that were to have produced experimental results and solid, peer-reviewed, scientific data to turn off their equipment, stop work just before the final results are in, and pursue some other course of study. This would be tragically short-sighted if permitted by the appropriations committee.

For 1991, SARA authorizes $35 million for this program. NIEHS has received applications totalling $29 million that have been peer-reviewed and approved for funding. I appreciate the difficulties imposed by the current fiscal restraints, but strongly urge you to consider increasing the request for the NIEHS program.

I would be pleased to answer any questions.

STATEMENT OF MIKE ELLIS, PRESIDENT, NATIONAL UTILITY CONTRACTORS ASSOCIATION

WASTEWATER TREATMENT FACILITIES

Senator GRASSLEY. Mr. Ellis.

Mr. ELLIS. Senator Grassley, it is my pleasure to represent the National Utility Contractors Association, or NUCA, before your subcommittee on EPA's 1991 appropriation.

Our organization is particularly concerned with the funding for wastewater treatment facilities under title VI of the Federal Water Pollution Control Act. As you know, the act is the primary Federal program for municipal wastewater treatment construction funds. Forty-four States have approved State revolving funds, or SRF's, which is testimony to the widespread acceptance of the innovative program by State governments.

The most important selling point to the utility construction industry, and other SRF advocates, was the assurance of a steady and dependable source of future sewer funding. Regrettably, the actual amount of Federal capitalization funds appropriate to States has been short of the authorized levels under the act. Even at full appropriation levels, SRF's are not adequately capitalized to assume the entire national responsibility for current and future wastewater treatment needs.

The continual wielding of the deficit axe on EPA sewer programs threatens 20 years of progress in the fight against water pollution. No one wants to see our wastewater pollution backlog grow or risk environmental backsliding in the 1990's from inadequate funding.

In summary, NUCA believes that the President's budget request of $1.6 billion for the SRF program is woefully insufficient and short-sighted. You have our strongest assurances that NUCA will support congressional efforts to fully fund the program at the $2.4 billion authorized by law.

Thank you.

Senator GRASSLEY. Thank you, Mr. Ellis. And thank you, panel.

[The statement follows:]

STATEMENT OF MIKE ELLIS

Madame Chairman, my name is Mike Ellis, President of the National Utility Contractors Association (NUCA). Our national membership organization is comprised of 2,000 construction businesses that build water, sewer and other underground facilities. I am also President of a utility construction firm, Westcon, in Pleasant Grove, Utah.

It is my pleasure to represent NUCA before the Senate Appropriations Subcommittee on VA, HUD, and Independent Agencies Resources on hearings involving the Fiscal Year 1991 appropriation for the Environmental Protection Agency (EPA). Our organization is particularly concerned with funding for the wastewater treatment facilities under Title VI of the Federal Water Pollution Control Act (hereafter referred to as the Act). As you know, the Act is the primary federal program for municipal wastewater treatment construction funds through the U.S. Environmental Protection Agency. The authorization for construction grants under Title II expired last year. The Act only provides for capitalization grants under Title VI for the transition to an innovative financing mechanism -- the state revolving loan fund (SRF) program.

Instead of direct grants to local levels of government, the Act makes a radical departure by giving states capitalization grants to establish SRF's. Local governments apply to the states for a construction loan from the SRF. As the loan is repaid, new capital will be used to finance future wastewater treatment construction projects. 44 states have approved SRF's, which is testimony to the widespread acceptance of the innovative program by state governments. The most important selling point to the utility construction industry and other advocates of the transition was the assurance of a steady and dependable source of future sewer funding.

Regrettably, the actual amount of federal capitalization funds appropriated to states has been short of the authorized levels under the Act. Even at full appropriation levels, our understanding is that SRF'S are not adequately capitalized to assume the entire national responsibility for a conservative $68 billion for the backlog of current wastewater treatment needs and future growth needs of $83.5 billion. For the short-term, Congress must make every effort to appropriate $2.4 billion in FY 1991 for SRF's under Title VI.

Water and sewer cleanup is the top NUCA priority and a top priority of the vast majority of Americans as indicated in recent polls. Our organization believes that funding for wastewater treatment programs must be appropriated at the maximum levels authorized by the Act. We commend this Subcommittee for attempting to raise the appropriation level last year. However, across-the-board cuts to comply with the Gramm-Rudman-Hollings Act negated the committee's good work. Funding levels remained extremely low over the last two years, effectively gutting the program and setting aside the major goal of providing sufficient initial funding of SRFs to turn the program back to the individual states. Congress will need to reopen the Federal Water Pollution Control Act -- primarily due to the federal funding shortfall over the past decade that has reduced federal commitment by half.

The continual wielding of the deficit axe on EPA sewer programs threatens 20 years of progress in the fight against water pollution. No one wants to see our wastewater pollution backlog grow. According to EPA, non-point sources now represent a larger source of water pollution than point sources from publicly owned treatment works. However, we cannot continue to make progress towards swimmable and fishable lakes, streams and oceans with an inadequate funding commitment from all levels of government.

In addition to the $68 billion needed to clean up current problems, another $15.5 billion must be invested to keep up with future growth. Lacking their own source of building funds, some communities have had to resort to building moratoriums. Another common practice is to shift the cost of new growth to residential, commerical and industrial development, which makes the construction of many projects economically infeasible. Most economically distressed areas and rural communities do not have this "extraction fee" option, and they must rely on assistance from higher levels of government.

The extractions placed on new growth come in the form of "development extractions," "impact fees," "proffers," or other terminology for on-

and off-site for water and sewer systems and other public facilities that are initially financed by the builder. A national survey conducted by Florida State University found that impact fees for sewers were more than three times as common as the combined total of fees for parks and fire facilities.

Although builders technically pay the fees, the cost is invariably passed through to consumers in the form of higher prices. The affordability of new homes has been threatened by higher development costs. The incremental effect is hard to quantify. However, the owner of a new home pays a higher mortgage premium for building these public facilities than if the same amount were borrowed by a government entity. This leads our argument full circle to the advantage of borrowing from an SRF by a local government over private financing of water and sewer systems through extraction fees.

The innovative SRF program has been aggressively adopted by the states. The State of New Jersey, for example, was one of the first in the Nation with an SRF, and they are considering a re-capitalization to build more sewer facilities with state funds. New York was the most recent state to obtain an approved SRF, and they received the largest capitalization grant under the program. On the other hand, West Virginia is one of the last states that is actively considering legislation to establish an SRF. That economically hard-pressed area is having difficulty finding state and local funding sources. After Massachusetts recently passed a law establishing an SRF, a major bond issue was subsequently authorized. But the bond rating collapsed, and construction funds have not been forthcoming. The states have demonstrated a good faith effort. As with any new program, a few problems do occur, but the initial results have generally been good.

In summary, NUCA believes that the President's budget request of $1.6 billion for the SRF program is woefully insufficient and short-sighted. We urge Congress and the Administration to fully fund the program at the $2.4 billion authorized by law.

Senator Grassley. I'll call the third panel: Scott Sklar of Solar Industries Association; Edmund C. Graber, Associated General Contractors of America; Robbi Savage, Association of State and Interstate Water Pollution Control Administrators; Gilbert Lessenco, chairman of the Washington Suburban Sanitation Commission; James B. Grant, National Association of State Departments of Agriculture; and Joel Packer of the National Education Association.

We'll start with you, Mr. Lessenco. My feeling is we're probably 10 minutes early and so the other panel members aren't here. I'm asking Scott Sklar, Mr. Graber, Robbi Savage, James Grant, and Joel Packer.

Would you start, please, and then we'll use all the available time. So proceed.

STATEMENT OF GILBERT B. LESSENCO, WATER POLLUTION CONTROL FEDERATION

Mr. Lessenco. Thank you so much, sir.

Senator Grassley, Mr. Kelly, good morning. My name is Gil Lessenco and, while I am chairman of the Washington Suburban Sanitary Commission, I come before you today on behalf of the Water Pollution Control Federation, a nonprofit educational and technical organization, gentlemen, that represents 35,000 water pollution control professionals.

As I listened to the earlier panels, I was caught with the dilemma that we now face on the Hill; namely, that we're dealing with an allocation of a dwindling supply of Federal funds for a growing list of needs. At the same time, from a political standpoint, as we move into the 1990's, there is increasing environmental awareness on the part of the public. We are here today to seek solutions which maximize the benefits for our environmental expenditures.

The Water Quality Act of 1987 phased out the construction grants program in favor of a new and innovative idea—the State revolving fund. This fund was to be capitalized by the Federal Government. It would allow a State to make loans to its own municipalities for wastewater treatment plant construction and, obviously, when the municipality paid back the loan, the State can lend the money to another municipality.

Senator, this program is struggling. The most serious problem is the lack of the promised capitalization funding from the Federal Government. We're already $400 million below authorized levels and could fall $1.2 billion behind, if we follow the suggestions that have come from the administration this year.

What we are requesting is not more money, but simply the level of funding which Congress agreed to provide when they adopted the Clean Water Act. I'm more familiar perhaps with Maryland than I am with other States. And the first intended use plan in our State, Senator, was approved in September 1989, identifying some $65 million in projects to be funded.

This year the fund will provide for $68 million in projects, but that's woefully under the $230 million which our State says is needed. Pass on, if you will, Mr. Kelly, to Senator Mikulski, that includes the Back River Plant in Baltimore where there's a need for some $93 million of improvements over the next few years.

My second point shall be brief. We ask you to be considerate of the problem of combined sewer overflows. They are found in some 1,200 older cities across the Nation. They're not found in my district, Prince Georges and Montgomery Counties, but we believe that, while the lead must come from municipalities, that some form of Federal financial assistance is in order in this area.

That concludes my testimony. Thank you for your courtesy.

Senator **Grassley**. Thank you.

[The statement follows:]

STATEMENT OF GILBERT B. LESSENCO

Good morning. My name is Gilbert B. Lessenco, and I am Chairman of the Washington Suburban Sanitary Commission, the authority that provides water and wastewater service for Montgomery County and Prince Georges County in Maryland. I come before you today on behalf of the Water Pollution Control Federation (WPCF).

The Water Pollution Control Federation is a non-profit educational and technical organization devoted to leadership and guidance in the preservation and enhancement of water quality worldwide. Founded in 1928, the Federation has over 35,000 members. These members include civil and environmental engineers, scientists, wastewater treatment plant operators and managers, and others working in state and local government, federal agencies, academia, and private practice. In short, we are the professionals who must implement whatever water pollution programs are enacted by federal, state, and local governments.

As the 1990s begin, we are entering a new era of environmental awareness. At the same time, the role of the federal government in water pollution control is changing. Many WPCF members focused their energies during the past two decades on the design and operation of treatment facilities, an activity largely funded by the federal government. But WPCF recognized in the early 1980s that this change in federal participation was coming and that greater responsibility for funding wastewater treatment facility construction, as well as enforcement of some water quality mandates, would have to be assumed by state and local governments. Therefore, we supported the provisions of the Water Quality Act of 1987 which phased out the construction grants program in favor of a new and innovative idea -- the State Revolving Fund (SRF).

This revolving fund, to be capitalized by the federal government, would allow a state to make loans to its own municipalities for wastewater treatment plant construction and other water quality projects. When these funds were paid back, the state could then make loans to other municipalities.

The State Revolving Fund, however, is struggling. The most serious problem is the lack of promised capitalization funding. The Water Quality Act authorized $1.2 billion for the SRF program in Fiscal Year (FY)89, $1.2 billion in FY90, $2.4 billion in FY91, $1.8 billion in FY92, $1.2 billion in FY93, and $600 million in FY94. Despite these authorized levels, less than $1 billion was appropriated in both FY89 and FY90, and the President's budget only calls for $1.6 billion in FY91. So as this subcommittee looks toward appropriations for FY91, the SRF program already is $400 million below authorized levels. If the President's budget request were to be enacted, the loan program would fall $1.2 billion behind.

If the current rate of appropriation continues, many states will not have sufficient funding in their revolving fund to adequately meet priority needs, i.e. secondary treatment, much less other water quality needs. As with any financial capitalization, a "critical mass" must be reached before the SRFs are viable and can begin to make loans.

In addition, actual funding for construction grants between FY87 and FY90 fell short of authorized levels. Of the $9.6 billion authorized, only $8.4 billion was appropriated. While this $1.2 billion shortfall may not seem overwhelming when compared to the authorized levels, it does become significant when you compare this shortfall to the $83.5 billion worth of water quality needs which EPA identified in its 1988 Needs Survey.

The Water Pollution Control Federation supported the authorized funding levels in the Water Quality Act because they represented an orderly, phased approach to transferring primary financial responsibility from the federal to state and local governments. But now, three years after enactment of the new funding regime, it is apparent that the transition has been anything but orderly. Even if Congress appropriates funding at the authorized level through FY94, the shortfall during the previous years combined with the growing disparity between appropriated levels and actual needs will jeopardize the intent of the 1987 Act.

WPCF therefore supports funding the SRF program at the authorized levels between FY91 and FY94, and urges that additional money be allocated to make up for the shortfall in wastewater facility construction funding since FY87. If this is done, total funding for wastewater facilities construction, including grants and SRFs, would terminate in FY94 at the $18 billion level which was envisioned by Congress and the states during the formation of the Water Quality Act. Let me emphasize that we are not asking for more money. We are merely requesting the level of funding which Congress agreed to provide.

WPCF believes that unless the full $18 billion funding commitment is met, the nation stands to lose some of the investment in wastewater treatment facilities it has made over the last 20 years. As the subcommittee may be aware, many of these facilities are nearing the end of their projected life and will need extensive upgrading or rebuilding. Unless adequate funding is available, we will see a stagnation in water quality improvement, and perhaps even a decline in the level of water quality which we have all worked so hard to achieve.

In states where the SRF has become viable, it has proven to be a valuable asset. In Maryland, the state with which I am personally familiar, the Fund came into existence in July, 1988. The Maryland Water Quality Financing Administration was established to oversee water quality funding, and the first intended use plan was approved in September, 1989. This plan identified $65 million in projects to be funded under the SRF, an amount made possible by leveraging the SRF funds. This year, it is estimated that the fund will provide for $68 million in projects.

While this is a good start on water quality financing in Maryland, it does not come close to meeting the $230 million in annual needs as identified by the Maryland Department of the Environment. One project, the nitrification/denitrification efforts at the Back River POTW in Baltimore, will cost $93 million over a 5 year period.

In addition to wastewater treatment facility construction, another major funding dilemma looms on the horizon: combined sewer overflows (CSOs). While not a particular problem for the Washington Suburban Sanitary Commission, combined sewers are found in some 1200 mostly older cities across the nation, including the District of Columbia and Alexandria, Virginia. They carry both rainwater and raw sewage. During periods of wet weather, the combined sewer will bypass treatment facilities and discharge directly into receiving waters. This is having an adverse impact on water quality, and there is an acknowledged need to bring CSO discharge points into compliance with federal water pollution laws.

However, this will be very expensive. Estimates for correcting CSOs range from $20 billion to $200 billion. The cost to a municipality for controlling its CSOs could be ten times greater than the cost it incurred for achieving secondary treatment. And because the cost may be borne by the relatively few affected municipalities, they could face significant financial hardships. In testimony before Congress prior to passage of the Clean Water Act of 1972, then-EPA Administrator William D. Ruckelshaus urged Congress not to include CSOs for construction grants eligibility because the nation could not afford it. That assessment of the magnitude of the problem remains just as valid today.

Recognizing that municipalities must bear the primary responsibility for funding CSO control initiatives, WPCF supports some type of federal financial assistance to help municipalities address their CSO problems. Even using conservative estimates, municipalities alone will not be able to pay for CSO controls, and the SRF program is currently not adequate to provide sufficient funding.

I would like to briefly mention three other water quality programs for which WPCF believes that adequate funding is vital. Two of these are mandated by the 1987 Act, and one is a WPCF initiative.

The first is the Section 319 Nonpoint Source Management Program. We commend the Bush Administration for requesting $14.25 million, which is the first time a President has requested funding for this program; however, it is still far below the $130 million authorized under the Clean Water Act. Many water pollution control professionals believe that until nonpoint sources of pollution are addressed, especially in rural areas, further improvements in water quality will be hindered. These funds could be very helpful in instituting incentives and management practices aimed at substantially reducing contaminated runoff from agriculture, mining, and other activities. These rural nonpoint sources particularly affect groundwater aquifers, which supply 95% of the drinking water needs in rural areas. Our technical people tell us it is much easier to prevent groundwater contamination than to restore degraded aquifers.

Given the importance of controlling nonpoint source pollution, WPCF supports funding the Nonpoint Source Program at a higher level than the President has requested. The program should be funded at a level sufficient for EPA and the states to fully implement this plan. In determining an appropriate level of funding, the subcommittee should consult with state governments.

Secondly, adequate funding must be provided for State Management Assistance Programs. Planning, enforcement, permitting, and monitoring requirements under the Water Quality Act have more than doubled funding needs for Section 106 management programs. Unfortunately, federal funding has not kept pace with these increases in mandated responsibilities. **WPCF supports $140 million for Section 106 and a full appropriation for the municipal wastewater treatment program under Section 205(j).**

Finally, I would like to call the attention of the subcommittee to an effort which the Water Pollution Control Federation has undertaken in the area of water pollution research. Recognizing that action had to be taken if we were to meet our nation's wastewater treatment research needs, WPCF established the WPCF Research Foundation. The purpose of the Foundation is to conduct basic and applied research on new and innovative wastewater treatment technologies. Funding will be derived from a subscription-based funding mechanism whereby municipalities contribute to the Foundation based on their size. The Foundation is also proposing to Congress a new cooperative cost-sharing partnership between the wastewater industry and EPA in support of this effort, a proposal which has received favorable attention from a number of Members of Congress, and the Foundation is working with the authorizing committee to draft authorization language for this proposal.

In conclusion, Mr. Chairman, many groups will come before your subcommittee requesting additional money for a myriad of programs. WPCF, in expressing its concerns, recognizes the difficult task the subcommittee faces in allocating a dwindling supply of federal funds for a growing list of environmental needs. While the subcommittee has fared better under the President's budget request than in recent years, the increases do not come close to matching the actual needs.

While it is important to prioritize all federal programs on the basis of need and appropriateness, it also is important to prioritize different environmental programs according to the total impact on public health and the environment. WPCF believes both the appropriating and authorizing committees should assess how we are spending our environmental funds. As each federal dollar dedicated to environmental quality and public health becomes harder to come by, getting the most benefit out of that dollar will become increasingly important. We must ensure that we are getting the maximum bang for our environmental buck.

This concludes my testimony. I appreciate the opportunity to come before you today and would be happy to answer any questions you may have.

STATEMENT OF JOEL PACKER, LEGISLATIVE SPECIALIST, NATIONAL EDUCATION ASSOCIATION

ASBESTOS SCHOOL HAZARD ABATEMENT ACT PROGRAM

Senator GRASSLEY. I'll go to Joel Packer. But before you start, I've already announced that we'd like to have Mr. Sklar, Mr. Graber, Robbi Savage, and James Grant to come to the table.

Would you proceed then, Mr. Packer?

Mr. PACKER. Thank you. I am Joel Packer, a legislative specialist with the National Education Association. And the NEA strongly urges this subcommittee to fully fund Federal programs designed to eliminate or significantly reduce the hazards of asbestos, lead in drinking water, and radon gas in our Nation's schools.

Regarding asbestos, NEA strongly supports the Asbestos School Hazard Abatement Act. This act provides loans and grants to schools to help them abate hazardous asbestos. A total of 44,000 school buildings are known to have friable asbestos that can create hazards. Unfortunately, the administration in both fiscal 1990 and 1991 called for no new funding for the ASHAA program. The largest appropriation ever provided was $50 million. Yet, from fiscal 1985 through fiscal 1989, over 9,700 schools asked for over $1.3 billion in funding, and 37 percent of the funds were requested for projects that EPA itself ranked as significantly damaged friable asbestos.

EPA estimates the total cost of asbestos abatement in schools will be $3 billion, with other estimates ranging as high as $6 billion. Unfortunately, schools have received only $202 million.

We call upon this subcommittee to recommend $250 million for ASHAA in fiscal 1991, the level set in the pending reauthorization bill.

LEAD IN DRINKING WATER

On lead in drinking water, briefly, the Lead Contamination Control Act authorized $30 million in grants to States to help schools remedy and take care of problems with lead in drinking water. Unfortunately, no funding has ever been provided for this program and young children are particularly vulnerable to the hazards of lead; it affects their intelligence, their IQ, and many other factors. And we would urge this subcommittee to recommend the full $30 million for grants to States for the Lead Contamination Control Act.

And, finally, regarding radon, we support $10 million in grants to States under the Indoor Radon Abatement Act, which can be used to help States, local governments, and schools take care of radon problems. EPA surveyed schools in 16 States and found that more than one-half of all the schools had at least one room with elevated radon levels.

In closing, we believe that our schoolchildren are faced with at least three serious environmental health hazards—asbestos, radon, and lead. And we call for this subcommittee to provide sufficient funding to help schools deal with these problems.

Thank you.

Senator GRASSLEY. Thank you.

[The statement follows:]

STATEMENT OF JOEL PACKER

Mr. Chairman and Members of the Subcommittee:

I am Joel Packer, a legislative specialist for the two million-member National Education Association. We strongly urge this Subcommittee to fully fund federal programs designed to eliminate or significantly reduce the hazards of asbestos, lead in drinking water, and radon gas in our nation's schools.

Asbestos in the Schools

NEA -- which coordinates the Asbestos-In-Schools Coalition representing over 40 organizations from education, health, state and local governments, labor, and environmental interests -- strongly supports the Asbestos School Hazard Abatement Act (ASHAA) and the Asbestos Hazard Emergency Response Act (AHERA).

The hazards of asbestos are well-known. Its link to cancer and other debilitating and potentially terminal diseases is widely recognized. Its prevalence in more than 44,000 school buildings across the nation is well-documented. The hazards of asbestos in the schools are so widespread the federal government must shoulder part of the financial responsibility for clean up. Unfortunately, the Bush Administration, in FY90 and FY91, called for no new funds for ASHAA. In fact, the largest appropriation ever provided for ASHAA -- $50 million -- is one-twenty-thousandth of the federal budget. From FY85 through FY89, only 16 percent of the 9,704 schools seeking assistance under ASHAA have been funded. Some 2,900 local education agencies have requested almost $1.3 billion in funding for 14,800 asbestos abatement projects, including 5,485 projects -- about 37 percent -- that were considered Hazard Category I projects by EPA. Fewer than one-third of even these projects, which are characterized by significantly damaged friable asbestos, have been funded.

Due to the ongoing implementation of AHERA, the need for federal assistance in asbestos abatement has become even greater. EPA estimates the total costs of asbestos abatement in schools nationwide will be $3 billion. Other estimates are as high as $6 billion. Yet schools have received only $202 million to date.

Recently, the hazards of asbestos have been questioned by some. Unfortunately, most critics of the statute have misrepresented what it does. AHERA does not require removal of asbestos in the vast majority of circumstances. The statute requires schools to inspect for asbestos, assess its condition, develop a comprehensive asbestos management plan, and implement appropriate response actions, including special operations and management procedures, repair, enclosure, encapsulation, or removal.

The contention of the critics of asbestos abatement is clearly out of touch with the conclusions of the EPA, the Centers for Disease Control, the Consumer Product Safety Commission, the National Institute for Occupational Safety and Health, the International Agency for Research on Cancer, and other numerous well-qualified experts.

Dr. William Nicholson of the Mount Sinai School of Medicine has stated, "It has been calculated that the lifetime risk for a 13-year exposure at (average indoor asbestos levels), beginning at age five, ranges from 4-12 asbestos cancer deaths per 100,000 exposed...For a school population of 20 million pupils, this translates into 800-2,400 cases of cancer."

Most other carcinogens are regulated by EPA when projected to cause one cancer death per one million people, well below the projected cancer deaths cited here.

By July 9, 1989, all schools were required to implement asbestos management plans developed under AHERA regulations, and, in fact, 94 percent of all schools had prepared management plans as of October 1989. It is, therefore, understandable that in the most recent round of applications, some 862 local education agencies applied for funds amounting to almost $406 million to carry out 1,856 asbestos abatement projects. The $44.7 million EPA will have available for ASHAA grants and loans is sufficient to pay for only 11 percent of those requests.

NEA strongly urges the Subcommittee to recommend $250 million for ASHAA for FY91, the level set in the pending ASHAA reauthorization (S. 1893). The next several years will be particularly difficult financially for schools as they implement their management plans. The Office of Management and Budget projects that about $25 million will be available from repayment of ASHAA loans in the Asbestos Trust Fund by FY91. We urge this Subcommittee to appropriate these funds for distribution. It makes no sense to leave money in the Trust Fund while the problems are so great and abatement actions are at their peak.

Lead in Drinking Water

The 1988 Lead Contamination Control Act (LCCA) required EPA to provide guidance to states and localities and authorized $30 million per year for grants to states to help schools and child care centers test for and remedy lead contamination in their drinking water. And yet, no funds were appropriated in either FY89 or FY90 to carry out activities under the Act.

By now, the health hazards of even low-level exposure to lead are well-documented and widely known. Young children are particularly vulnerable to the adverse physical and behavioral effects of lead. Overexposure to lead can permanently impair a child's mental and physical development. In 1986, EPA estimated that each year 29,000 children require medical treatment, and 230,000 suffer an IQ loss due to elevated lead levels in drinking water. And new research demonstrates the decline in intellectual capacity is irreversible. Comparatively low exposure to lead by children has been linked to damage to the central and peripheral nervous system, learning disabilities, shorter stature, impaired hearing, and impaired formation and function of blood cells.

EPA has identified more than 100 different models of water coolers with lead; nationwide, more than 1 million water coolers may have hazardous lead components. However, water coolers are not the only source of lead contaminants in drinking water in the schools. Drinking water may be contaminated by lead from the corrosion of lead pipes, solder, or fixtures. Moreover, given the water use patterns in schools, which are closed on weekends and over vacations, water that remains stagnant in interior plumbing may contain higher levels of lead, due to its longer contact with lead solder or pipes.

NEA urges the Subcommittee to recommend the full $30 million authorized for grants to states in FY91.

Radon Contamination

The Indoor Radon Abatement Act of 1988 authorized $10 million a year to help states set up programs to address the hazards of radon, including public information efforts and grants to schools for testing and mitigation. The Bush Administration recommended $9 million for this program for FY91, the same level appropriated in FY90. NEA also applauds the $1 million appropriated in FY90 for EPA to conduct a national survey of radon contamination in schools.

Radon is a colorless, odorless, tasteless, radioactive gas that occurs naturally in soil and rocks. EPA estimates that radon is responsible for some 20,000 lung cancer deaths a year; only cigarette-smoking caused more cases of lung cancer. As with many other health hazards, young children are more susceptible than adults to the risk of cancer from radon.

An EPA survey of radon concentrations in schools, conducted in 16 states and 130 schools, revealed that more than half of all schools surveyed had at least one room with radon levels above 4 picoCuries per Liter (pCi/L), the current EPA standard for radon. About one in five of the individual rooms surveyed had radon levels above 4 pCi/L, and three percent of the school rooms had radon levels of more than 20 pCi/L, with the highest reading being 136 pCi/L, the equivalent of smoking 17 packs of cigarettes per day.

High levels of radon gas occurred in some school rooms in all the tested states. And since schools remain closed on weekends and over vacations, radon can built up to hazardous levels.

EPA has developed guidance materials to help schools do effective testing and mitigation work. And in conjuction with NEA and the National PTA, EPA has prepared a brochure urging schools to test for radon. NEA has distributed more than 100,000 copies of this brochure, "Every School Should Take This Simple Test," to our members. The costs for affected schools for testing and mitigation is potentially great.

NEA urges you to recommend the full $10 million authorized to carry out the state grant program.

Conclusion

America's elementary and secondary school children are faced with at least three serious environmental health hazards: asbestos, radon, and lead in drinking water.

We recognize that the Congress has many difficult choices as it attempts to develop an FY91 spending plan. But we can think of no more compelling national need than the safety of our children. We urge you to give funding for ASHAA, LCCA, and IRAA your full support.

Thank you.

STATEMENT OF SAMUEL P. HUNTER, ASSOCIATED GENERAL CONTRACTORS OF AMERICA

WASTEWATER TREATMENT GRANTS PROGRAM

Senator GRASSLEY. Would you proceed and give us your name and your organization?

Mr. HUNTER. Yes. My name is Sam Hunter. I am a construction contractor from Goldsboro, NC. I appreciate the opportunity to present some of the concerns of the Associated General Contractors of America on the important topic of funding for the EPA Wastewater Treatment Grants Program.

Senator GRASSLEY. And I assume that you're talking the place of——

Mr. HUNTER. Mr. Graber's place.

Senator GRASSLEY. OK; that's perfectly legitimate. Proceed.

Mr. HUNTER. When Congress passed the Water Quality Act of 1987, a very clear message was sent to the American public. The message was that clean water is an important factor in the quality of our life and remains a primary goal of this country, that it is committed to achieving.

It was decided that the best way to continue progress toward the clean water goals was by removing responsibility for the funding of this effort from the Federal Government and giving it to the States. To ensure that previous accomplishments would not be undermined and that progress would continue, a phaseout of the Federal program was instituted.

The phaseout called for gradual reduction in Federal grants and for States to establish revolving loan mechanisms to fund the program into the future. Federal seed money in the form of capitalization grants was to provide help for the States to establish their loan programs. Minimum funding levels were established to assure continuity and a smooth transition.

WATER QUALITY ACT SERIOUSLY UNDERFUNDED

The obligation of the States and local governments to fund future clean water needs is conditioned, however, on the Federal Government meeting its obligation to ensure that adequate capitalization funding is provided. Unfortunately, this program has been subject to continuous underfunding since 1986. Over the past 5 years, $1.6 billion has been cut from authorized levels contained in the Water Quality Act.

AGC is seriously concerned that clean water progress will be set back substantially if this underfunding continues. Already there are signs that this is happening. EPA's 1988 needs survey documents $83.5 billion in facility needs. This represents a nearly $3 billion increase since the last needs survey.

We would like to point out two factors which make it particularly unwise to make further cuts in clean water funding. First, if the SRF's are not successful in continuing clean water progress, it is conceivable that once again the Federal Government will be asked to provide necessary funding.

Second, wastewater treatment facilities are a major element in the Nation's infrastructure. Studies have demonstrated that positive ripple effect of infrastructure spending on the Nation's gross national product.

In conclusion, AGC recently called upon the House Public Works and Transportation Committee to increase authorizations for fiscal years 1992 through 1994 to recoup the funds lost to underfunding since 1987. Consistent with that request, AGC respectfully urges this subcommittee to provide the $2.4 billion for the program in fiscal year 1991 to ensure the continued success of the SRF's.

Thank you.

[The statement follows:]

STATEMENT OF SAMUEL P. HUNTER

My name is Sam Hunter and I am a construction contractor from Goldsboro, North Carolina. With me is Brian Deery who is with the national staff of the Associated General Contractors of America. I am here today representing AGC and its 102 chapters nationwide. AGC represents more than 32,500 firms, including 8,000 of America's leading general contracting companies, which are responsible for the employment of more than 3,500,000 individuals. These member contractors perform more than 80 percent of America's contract construction of commercial buildings, highways, heavy, industrial and municipal-utilities facilities.

AGC appreciates the opportunity to present its concerns on the important topic of funding for the EPA Wastewater Treatment grants program.

AGC calls on this subcommittee to provide the full $2.4 billion in funding authorized for capitalization grants for the State Revolving Loan Fund (SRF) program for FY 1991. Anything less will seriously undermine the smooth transition of this federal program to the states and constitute a major setback to efforts to meet our nation's clean water needs.

When Congress passed the Water Quality Act of 1987, a very clear message was sent to the American public. The message was that clean water is an important factor in the quality of life and remains a primary goal that this country is committed to achieving. In passing that legislation, tough choices were made. It was decided that the best way to continue progress towards the clean water goals was by removing responsibility for the funding of this effort from the federal government and giving it to the states. To ensure that previous accomplishments would not be undermined and that progress would continue, a rational, reasonable phase out of the federal program was instituted. The phaseout calls for a gradual reduction in federal grants and for states to establish revolving loan mechanisms to fund the program into the future. Federal seed money in the form of capitalization grants was to be provided to help states establish their loan programs. States were required to provide a 20 percent matching share. Minimum funding levels were established to ensure continuity and a smooth transition.

Unlike the existing construction grants program, the SRFs will eventually be self-perpetuating. Local governments will be required to establish user charge systems to pay back the loans. The repayments will go back into the SRFs thus providing money for future clean water needs. AGC strongly supports this Congressional effort to continue progress toward improved water quality by compelling state and local governments to meet their obligation to pay the costs involved. This obligation of state and local governments is conditioned, however, on the federal government meeting its obligation to ensure that adequate capitalization funding is provided.

Unfortunately, this program has been subject to continuous underfunding since 1986. Over the past five fiscal years, $1.6 billion has been cut from the authorized levels contained in the Water Quality Act. The Administration's budget proposal for fiscal year 1991 requests only $1.6 billion, a thirty-three percent cut from the minimum necessary funding level of $2.4 billion. AGC is seriously concerned that clean water progress will be set back substantially if this underfunding continues.

Already there are signs that this is happening. EPA's 1988 Needs Survey, which estimates the capital costs to build publicly owned municipal wastewater treatment facilities to comply with the requirements of the Clean Water Act, documents $83.5 billion in facility needs. After accounting for inflation, this represents a nearly $3 billion increase in needs since the last Needs Survey was reported in 1986.

While most of the major wastewater systems are in compliance with water quality standards, a significant percentage of small systems are not in compliance. In addition, many of the systems that were built in the mid-1970s are beginning to approach the end of their useful lives and will need modernization, replacement and overhaul. Also, new water quality projects to control non-point source pollution and to correct combined sewer overflow problems will compete with the more traditional projects for the limited available funds. This is not encouraging news.

While AGC fully recognizes the deficit situation Congress is currently grappling with, we must point out two factors which make it particularly unwise to make further cuts in clean water funding. First, if the SRFs are not successful in continuing clean water progress it is conceivable that once again the federal government will be asked to provide necessary funding. We believe that the American people will demand that the funds be provided. In the long run the federal budget is better off providing the needed funds today to ensure that state programs are successfully implemented.

Second, wastewater treatment facilities are a major element in the nation's infrastructure. Studies have demonstrated the positive "ripple effect" of infrastructure spending on the nation's gross national product. Infrastructure spending should be viewed for what it is, an indispensable investment in this country's future.

Thus far, 44 states have established acceptable SRFs and have been awarded capitalization grants by EPA. These SRFs must be provided with sufficient capitalization funds in the future to ensure their success. Therefore, in recent testimony, AGC called upon the House Public Works and Transportation Committee to increase authorizations for FY 1992 through FY 1994 to recoup the funds lost to underfunding since 1987. Consistent with that request, AGC respectfully urges this subcommittee to provide the full $2.4 billion for the program for FY 1991 to ensure the success of the SRFs.

Senator GRASSLEY. You're Mr. Grant?

Before Mr. Grant starts, we've called Mr. Sklar and also Robbi Savage. If you're here, would you come up so you can be prepared to testify.

OK. Mr. Grant?

STATEMENT OF JAMES B. GRANT, EXECUTIVE SECRETARY, NATIONAL ASSOCIATION OF STATE DEPARTMENT OF AGRICULTURE

Mr. GRANT. Thank you, Mr. Chairman. I'm J.B. Grant, executive secretary of the National Association of State Departments of Agriculture, and I'll very briefly summarize my statement this morning.

The EPA/State cooperative agreements for certification and training of pesticide applicators, as well as for inspection and enforcement of pesticide use regulations, are essential to ensure that pesticides are used properly by knowledgeable people. Public confidence and perception in the use of pesticides needs to be restored.

Current EPA appropriation requests are meant to support these needs for future development. And we're pleased to see the Agency requesting additional funds that will be essential to meet these increasing responsibilities.

SURVEY OF STATE FINANCIAL RESOURCES

In cooperation with our association, the American Association of Pesticide Control Officials completed a survey of State financial resources in 1989, including EPA cooperative agreement funds utilized for pesticide enforcement, certification, and training programs in the States. This survey covered existing future funding for the current pesticide programs and future funding needs for ground water, worker safety, endangered species, pesticide disposal, and updating of the applicator certification program.

We are pleased that EPA is requesting additional funds in this fiscal year 1991 for the State/EPA cooperative agreement. The $25.4 million used for the fiscal year 1990 State/EPA programs, and the addition of $5 million in fiscal year 1991 for an expansion of the 1990 activities, a total of $30.4 million, will be essential in continuing and expanding the 1990 programs.

The States, in 1980, provided 77 percent of the funds for pesticide enforcement and EPA provided only 23 percent. States provide 70 percent of the pesticide certification and training funds and EPA provides 30 percent. With the increases in fiscal year 1990, and the proposed increases in fiscal year 1991, EPA will be providing the States a greater share of support for the cooperative pesticide programs. However, States still will be supplying a majority of funds for these programs.

Although EPA has increased its funding for these programs in fiscal years 1990 and 1991, it still remains at a minimal level. It is important that EPA support be continued and that Congress provide additional funds for any new or expanded pesticide programs it enacts for implementation by the States.

We are very pleased, Senator, to make this statement to you.

Senator **Grassley**. Thank you very much.

[The statement follows:]

STATEMENT OF JAMES B. GRANT

Mr. Chairman and members of the subcommittee, I am J.B. Grant, Executive Secretary of the National Association of State Departments of Agriculture (NASDA). I am pleased to make this statement on behalf of NASDA and the Association of American Pesticide Control Officials (AAPCO).

The EPA/State Cooperative Agreements for Certification and Training of Pesticide Applicators, as well as for Inspection and Enforcement of Pesticide Use Regulations, are essential to ensure that pesticides are used properly by knowledgeable people. Public confidence and perception in the use of pesticides needs to be restored. Food safety, worker protection, environmental and agricultural concerns are issues the states and EPA must continue to address cooperatively by ensuring proper use of pesticides. Government action to enhance state-level programs to ensure safe use of pesticides is a positive step in restoring a measure of public confidence in the regulatory system. Approval of the increases requested in the Environmental Protection Agency budget to support state programs is critical to state agencies.

Historically, these cooperative programs have been underfunded in terms of federal grants; now EPA is launching significant new initiatives that will require additional state-level efforts in the coming years. For example, EPA's groundwater strategy will require states to devote new or expanded resources to assess groundwater resources in detail, in order to develop state management plans tailored to local conditions. EPA's endangered species and worker protection programs also will become effective in fiscal year 1991; both will require increased state efforts to provide appropriate training to the affected user community. All three of these initiatives will require state agencies, which traditionally have had the lead responsiblity for pesticide regulation, to establish new institutional links with other state agencies having relevant responsibilities for water quality, fish and wildlife management and worker protection. Current EPA appropriation requests are meant to support these needs for future development, and we are pleased to see the agency requesting additional funds that will be essential to meet these increased responsibilities.

In cooperation with NASDA, AAPCO completed a survey of state financial resources in 1989, including EPA Cooperative Agreement funds utilized for pesticide enforcement, certification and training programs in the states. Thirty-nine state lead agencies for pesticide programs and 32 state cooperative extension services responded to the survey, which covered existing future funding for the current pesticide programs and future funding needs for groundwater, worker safety, endangered species, pesticide disposal and updating of the applicator certification requirements. I will provide the committee with a copy of this report at the conclusion of my testimony.

We are pleased that EPA is requesting additional funds in fiscal year 1991 for the State/EPA Cooperative Agreements, especially because of the previously mentioned new pesticide program requirements, which the states must begin implementing this fiscal year--1990. The $25.4 million used for the FY 1990 State/EPA programs and the addition of $5 million in FY 1991 for an expansion of the 1990 activities--a total of $30.4 million--will be essential in continuing and expanding the 1990 programs.

EPA funds for pesticide enforcement, certification and training have virtually remained the same from fiscal year 1979 to fiscal year 1989, except for small increases in fiscal year 1989. States in the 1980s provided 77 percent of the funds for pesticide enforcement; EPA provided only 23 percent. States provide 70 percent of the pesticide certification and training funds and EPA provides 30 percent. With the increases in FY 1990 and the proposed increased in FY 1991, EPA will be providing the states a greater share of support for the cooperative pesticide programs. However, states still will be supplying a majority of funds for these programs.

The total state and federal funding projected by the states for continuation of pesticide enforcement, certification and training programs in fiscal year 1991 is $60.9 million. Total funding projected for continuing the 1990 programs is $23 million. Based on the AAPCO survey, the total projected funding for current and new priority programs is $83.9 million. Applying the AAPCO survey results from the 39 responding states to all fifty states strongly confirms the need for continuation of the $25.4 million of EPA funds and the addition of $5 million requested in fiscal year 1991.

We also want to point out that a further increase in funding will be necessary for pesticide and pesticide container disposal, and changes in pesticide certification, when new and updated standards for these programs are made final by EPA. States are generally bearing the major financial burden of pesticide regulation and education. Increasing demands on state funds make it very unlikely that any significant increases in state funding for pesticide programs will be forthcoming in the uture. Therefore, the enactment of expanded and new pesticide regulatory programs at the federal level, without concurrently providing funding to the states for implementation of these programs, must be recognized.

In summary, NASDA believes the states are carrying the major financial burden of administering pesticide regulatory programs in this country to the extent of more than 70 percent of the total cost. Although EPA has increased its funding for these programs in fiscal years 1990 and 1991, it remains at a minimal level. It is important that EPA support be continued and that Congress provide additional funds for any new or expanded pesticide programs it enacts for implementation by the states. NASDA strongly supports EPA's request of $30.4 million for current programs and increased funding for any new pesticide programs in fiscal year 1991.

I appreciate the opportunity to appear before you on this matter and urge the subcommittee to recommend approval of EPA's increased budget request for fiscal year 1991. Additional state grants in the fiscal year 1991 budget are essential to maintaining the states' role as credible regulators in a period of increased public concern about the safe use of pesticides.

PREPARED STATEMENT

Senator GRASSLEY. We have received the prepared statement of Scott Sklar, executive director of Solar Energy Industries Association. Without objection, it will be inserted in the hearing record at this point.

[The statement follows:]

STATEMENT OF SCOTT SKLAR

INTRODUCTION

The Solar Energy Industries Association (SEIA), the national trade organization of the photovoltaics and solar thermal manufacturers and component suppliers, urges the Subcommittee to appropriate $4,350,000 in FY'91 in which $350,000 is to be equally cost-shared with the U.S. Department of Energy (US/DOE) for environmental analysis and interagency/industry research, $1 million to be cost-shared on solar detoxification commercialization, and $3 million for global climate change mitigation demonstrations. This action provides urgently needed direction to more easily commercialize United States solar and renewable energy research & development and enhance current applications.

The U.S. solar industry is asking that a small amount of Environmental Protection Agency (EPA) funds be directed to:

- to establish solar and renewable energy cost-shared commercialization projects to demonstrate how solar applications can be used to displace or offset fossil energy producing global climate change gases. Mitigation through EPA co-funding six projects at $500,000 each in photovoltaics, solar thermal, biomass, geothermal, and wind with additional co-funding by industry, the U.S. Department of Energy and the Electric Power Research Institute (EPRI). (cost: $3 million).
- to allow EPA to provide analysis of the solar and renewable energy industries on the extent these technologies can both technically and economically contribute to offset conventional energy applications and to assist industry in providing analysis to promote further utilization solar and renewable energy by resolving short and long term environmental regulatory impediments. (cost: $350,000).
- to cost-share ongoing applied research in recent breakthrough using solar concentration to breakdown toxic and hazardous wastes which has already been demonstrated as effective in breaking down dioxins, CFC's and solvents in water. (cost: $1 million).

PROPOSAL

First, solar energy has virtually unlimited resource potential, and thus is an essential component for reducing pollutants which cause global warming and acid rain. Although most renewable energy technologies have been demonstrated-economic and institutional barriers have limited widespread use. Because of the clear environmental benefits, wider application of renewable energy, the Environmental Protection Agency (EPA) must be supported in establishing a technology-specific program to demonstrate the practical potential of renewable energy as an environmental mitigation strategy. The renewable energy technology demonstration program will illustrate that every region in the United States can successfully integrate renewable resources into its energy portfolio, achieving energy growth while decreasing contributions to air pollution.

It is crucial to EPA's mission to ensure that to the fullest extent possible, environmentally sound technologies are deployed widely. Renewable energy technologies are indeed environmentally sound. Using solar resources to meet growing energy demand in every utility jurisdiction across the nation is essential for achieving CO2, SO2, and NOx emissions reductions. In order for renewable resources to be applied more widely, energy suppliers and users must witness firsthand what renewables can do within their regions -- that is provide cost-effective reliable energy that enhances their environmental goals.

The six proposed demonstration programs at the aggregate $3 million level will create a more dispersed network of large-scaled renewable energy applications. Utility planners and regulators will then have regional experience in renewable resource management. These demonstrations could be jointly funded by EPA, DOE (and its affiliated laboratories), the Electric Power Research Institute (EPRI), state energy offices, and the local utilities. They will be designed to take advantage of a specific region's indigenous renewable energy resources. EPA's preliminary contributions of $500,000 per demonstration site will provide seed funding for project initiation. The following is a list of the kinds of prospective demonstration projects: photovoltaics (midwest) 5 MW, wind (northwest) 25 MW, solar thermal-electric (southwest) 50 MW, geothermal (northwest) 50 MW, hydropower, existing dam (mid-Atlantic) 25 MW, and wood waste/ag'residue direct combustion (southeast/midwest) 50 MW.

Second, the Environmental Protection Agency (EPA) has limited interaction with the solar and renewable energy industries, little involvement with research supported by the U.S. Department of Energy, and has developed absolutely no generally-accepted analysis to determine what extent, in fact, can solar and renewable energy applications offer to offset emissions and wastes. Unless these generally-accepted guidelines are incorporated into ongoing EPA analysis, neither the country of our industries will be adequately considered as potential contributors in future policy development and implementation. A national consensus on the social costs of conventional energy must be developed and considered in federal and state energy and environmental regulatory and budget processes.

The final component or guidelines for these monies would for EPA to assist industry on a case-by-case basis in meeting national or state mandated environmental guidelines that may hamper further commercialization. Analysis at EPA laboratories or co-analysis with US/DOE laboratories on emission, energy by-products and resource assessment are very important to help national, state and local environmental planners and regulators make hard decisions on energy utilization and offsets. Both our association and those of other renewable trade associations have important needs if the Subcommittee will allow a minimal amount of funds be directed towards these issues. As the chart on the page four shows, solar and renewable energy resources, excluding hydropower, now produce nearly 8,000 megawatts of utility-grade electricity. Further enhancement of these technologies can double this amount in five years.

Third, during 1989 an important undertaking by the Solar Energy Research Institute (SERI), Sandia National Laboratories (SNL) and the U.S. solar energy industry to prove whether computer modeling was indeed correct in that use of concentrated sunlight can breakdown toxic wastes beyond conventional technology in a more efficient and environmentally-benign fashion. Tests conducted by Sandia National Laboratories proved that the newest reflectors and receivers developed by U.S. industry with the support of the U.S. Department of Energy (US/DOE) can play an important role in creating an entirely new industry.

Groundwater contamination and waste disposal have been an increasing problem throughout the world. Existing incineration methods are not ideal in destroying toxics and produce potentially harmful by-products. Solar detoxification has the possibility not only to more effectively destroy water-borne toxins, but without harmful by-products.

The press briefing paper, attached, describes the potential of the use of high solar flux to breakdown wastes to EPA-acceptable levels without dangerous by-products as with incineration. More active EPA involvement is necessary to supplement ongoing US/DOE, federal laboratory, & industry efforts to bring this technology to the market place. With minor EPA-involvement in an activist sense, these technologies can be brought to the marketplace at least two years earlier.

CONCLUSION

The United States solar energy research and development program have been an outstanding success even through disinterest, budget cuts, and low energy prices. Solar water heating technologies are fully integrated into the marketplace with some utilities instituting incentive programs for peak load shaving. Over 200 megawatts of solar thermal power technologies provide utility-grade electricity for over 150,000 homes with new generations of technology that will be lower cost. Photovoltaic costs have come down ten fold in a decade and the program has had over twenty efficiency records in 1988 alone! As research increases, solar energy costs will be lowered and market penetration will significantly increase.

Renewable energy technologies can reduce greenhouse gas emissions significantly by over 30 percent in the building sector which accounts for 35 percent of our energy, by over 20 percent in the utility sector for peak power and by 10 percent for baseload generation which accounts for 25 percent of our energy, and for remote power applications which account for 5 percent of U.S. energy use. (Over 50 percent of Third World energy use.) The chart below illustrates solar and renewable energy impact in less than fifteen years:

RENEWABLE ELECTRIC ENERGY UTILITY GENERATION IN THE UNITED STATES AS OF MAY 1989

Anaerobic Digestion	17.94 MW
Geothermal	2211.85 MW
Landfill Gas	49.82 MW
Municipal Solid Waste	630.60 MW
Photovoltaics	16.10 MW
Solar Thermal Power	201.25 MW
Wind	1500.00 MW
Wood/Agric. Wastes	3189.26 MW
TOTAL:	7816.82 MW

Note: Expressed in megawatts (MW). Does not include approximately 73,000 MW of hydropower nor include approximately 1896.75 of renewable energy plants under construction, or solar water heating and other passive solar and energy conservation measures offsetting electricity.

The Solar Energy Industries Association (SEIA) urges the Subcommittee to support our request for $4,350,000 for FY'91. I caution the Subcommittee that failure to do so will cause inordinate delays of new technologies entering the market, incomplete policy analysis, and unnecessary limitations for increased solar and renewable energy use.

Joint ventures are an essential component to this proposal and have been shown as effective by our international competitors particularly in Germany and Japan. However, the Congress must be aware that the U.S. solar energy industry is a very young and small industry. The vast majority of solar companies are less than fifteen years old and are small businesses. Therefore, industry must be supported by the federal agencies most able to further analysis and generic research.

On behalf of the Solar Energy Industries Association, I can assure the Subcommittee that the benefits will far outweigh this small funding request. Thank you.

ADDENDUM: Press Advisory released May 1, 1989

SOLAR TECHNOLOGIES SUCCESSFULLY REDUCE HAZARDOUS WASTES

Contact: Scott Sklar
(703) 524-6100

Scientists at the Solar Energy Research Institute (SERI) and Sandia National Laboratories (SNL) have achieved a major technology breakthrough by using solar energy to destroy hazardous wastes, meeting the tough environmental standards set by the Environmental Protection Agency (EPA).

Though solar thermal technologies were originally developed to produce electricity and heat, researchers have found that sunlight can be concentrated into intense beams of energy up to 60,000 times normal sunlight, developing temperatures that can approach that of the sun (approximately 6,000 degrees C). These beams have the capability of destroying hazardous chemicals.

Toxic chemicals have been destroyed to 99.9999%

Using the U.S. Army solar furnace at White Sands Missile Range, researchers have destroyed samples of dioxin, one of the most toxic chemicals known, to more than 99.9999%. In other words, less than one-millionth of the original sample remained after each test. You can picture this by thinking of a swimming pool measuring 40 feet by 20 feet by six feet deep, full of dioxin. After solar exposure, less than 1/2 cup of the pollutant would have remained in the pool!

Test results have shown that by exposing a sample of hazardous waste to solar heat, destruction efficiencies can be increased by at least 10,000 times over that expected from heating alone. It also appears that solar heating produces less of the harmful chemicals often created as products of a normal incineration process. Because soil that has been contaminated with dioxin requires large quantities of fossil fuel to burn completely enough to meet EPA regulations, the solar approach is considerably less expensive and eliminates air emissions that are themselves of environmental concern.

The U.S. produces more than 265 million tons of toxic wastes each year!

The significance of this research is highlighted by the fact that the United States annually produces more than 265 million tons of toxic wastes -- that's one ton for every person in the country -- and only five million tons of this are incinerated or recycled. The rest ends up in our environment, either stored on site, disposed of in landfills, or dumped in the ocean.

Furthermore, the quantity of hazardous chemicals produced is increasing greatly every year. During America's first 200 years, for example, we produced less hazardous wastes that we did just during the current decade. And now we're seeing the results of our environment straining to absorb this avalanche of waste. Nearly one-third of the country's large public water supplies are contaminated beyond EPA safe levels. The Department of Energy has estimated that it may cost more than $100 billion to clean just its own sites. And as the EPA and other regulatory agencies move toward eliminating all landfilling of hazardous wastes, American industry is finding that it must treat wastes and render them harmless before disposition, creating the need for new technologies to help stop this major threat to our environment.

Solar energy can alter chemical reactions

The use of the solar process resulted from research that found that solar beams have unique capabilities to alter chemical reactions. Beams are made up of radiant energy called photons that have different energy levels. The shorter wavelengths are the most energetic, with the energy level decreasing as the wavelengths become longer. It is the mixture of high and low energy photons that allows the solar beam to attack chemicals so efficiently. Together the two types of photons produce sufficient energy and heat to destroy hazardous chemicals.

High temperatures are essential in the process. Researchers found that very little of the dioxin was destroyed until temperatures of 600 C were reached, and by 750 C, about 98% of the sample was destroyed. When the 99.9999% destruction level was reached, only one part of the material out of one million remained. SERI researchers are continuing to study the effects of the solar beam on chemicals, leading to a better estimation of the potential of concentrated solar energy on the destruction of hazardous wastes.

Solar energy can also clean contaminated water

While these studies on chemical waste continue, federal researchers and U.S. industry researchers are also looking at solar decontamination of water. Because even small quantities of chemicals such as pesticides and organic solvents can make water unfit to drink, this area represents another major environmental hazard facing the nation. Studies have found that the high energy photons in the solar beam are absorbed by chemicals in water, causing the chemicals to decompose into components that can easily be treated. This is actually the same basic process by which a 'polluted river flowing slowly through sunlit fields can partially cleanse itself as it makes it way to the sea. Scientists have accelerated the decontamination process by concentrating the solar energy and adding a catalyst, which makes the water less transparent to the sun.

SERI researchers are now exploring techniques to increase the efficiency of solar decontamination of water, concentrating on determining the effect of increasing solar concentration and catalyst development. Unlike other decontamination processes which transfer the hazardous chemicals to another medium such as the air, solar energy totally destroys the pollutants.

Summary

In addition to the advantages of solar decontamination described above, the modular nature of solar energy systems makes them suitable for almost any size requirement. Small systems can be installed on the site of the original producer, in fact, enabling industry to destroy chemicals at their origin. This not only minimizes transportation of the waste, it also can avoid further liability faced by industry for chemical disposal.

More research is needed to prove that solar systems can work economically, that complete systems can be developed, and that necessary regulatory safeguards can be provided. The result will be an effective option for destroying hazardous chemicals which pose an ever-increasing threat to our environment.

INTRODUCTION OF PANEL

Senator GRASSLEY. OK. I'll call the next panel: Joe Mayer, Rockwell International; Hank Steenstra, TRW; Ed Furtek, University of California; Barbara Perry, University of Maryland; Jack Crowley, American Association of Universities; and John Bollinger, Paralyzed Veterans of America.

If everybody's here, we'll go in the way I announced you.

Mr. Mayer?

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

STATEMENT OF JOSEPH T. MAYER, ROCKWELL INTERNATIONAL

Mr. MAYER. Good morning, Senator Grassley. My name is Joe Mayer of Rockwell International. I am happy to be here with my colleague, Hank Steenstra of TRW, to testify in support of NASA's fiscal year 1991 budget request and the need for an adequate 302(b) allocation to this subcommittee.

We appear on this panel in behalf of a coalition of aerospace companies, for aerospace is a part of the diverse, yet not divergent, set of national program priorities which come under the jurisdiction of this subcommittee. We are one element of the Alliance for Planet Earth—the veterans, the homeless, environmentalists, scientists and the space explorers that Madam Chair, Senator Mikulski, proposed in a speech to the National Capitol section of AIAA.

The aerospace community strongly supports President Bush's fiscal year 1991 budget request for NASA, with its core programs of space science and transportation, as well as Space Station Freedom and its vision for the future. In our view, it constitutes a significant and necessary investment in our Nation's competitiveness and economic vitality.

While much has been written concerning the benefits of America's civil space program to the well-being of men and women on Earth, I would like to discuss briefly the merits of aerospace research and exploration in two areas.

EDUCATION IN SCIENCES AND MATH

First, the state of American education in the sciences and math is a major national concern. For our part, aerospace companies are keenly aware of the need for technically competent personnel and we actively promote a range of programs to advance the cause of educational excellence.

The U.S. civil space program, with its ambitious agenda of exploration and research, can stimulate a new generation to excel in science, math and engineering. Moreover, a robust space program holds the promise of future career opportunities for our young people.

Second, it is from space that the fragility and beauty of the Earth's environment comes most clearly into focus. If we see in space the challenge to explore, then we see from space the equally great challenge to preserve. NASA's proposed Mission to Planet Earth points the way to increased opportunities for monitoring and understanding mankind's most fundamental common heritage.

Mr. Chairman, that concludes my oral statement. I ask that our joint testimony from Mr. Steenstra and myself be printed in the record. And thank you very much.

[The statements follow:]

STATEMENT OF JOSEPH T. MAYER

GOOD MORNING MADAME CHAIR AND MEMBERS OF THE SUBCOMMITTEE. MY NAME IS JOE MAYER OF ROCKWELL INTERNATIONAL. I AM HAPPY TO BE HERE WITH MY COLLEAGUE, HANK STEENSTRA OF TRW, TO TESTIFY IN SUPPORT OF NASA'S FY1991 BUDGET REQUEST AND THE NEED FOR AN ADEQUATE "302(B)" ALLOCATION TO THIS SUBCOMMITTEE.

WE APPEAR ON THIS PANEL ON BEHALF OF A COALITION OF AEROSPACE COMPANIES. FOR AEROSPACE IS PART OF THE DIVERSE -- BUT NOT DIVERGENT -- SET OF NATIONAL PROGRAM PRIORITIES WHICH COME UNDER THE JURISDICTION OF THIS SUBCOMMITTEE. WE ARE ONE ELEMENT OF THE "ALLIANCE FOR PLANET EARTH" -- THE VETERANS, THE HOMELESS, ENVIRONMENTALISTS, SCIENTISTS, AND THE EXPLORERS -- THAT YOU, MADAME CHAIR, PROPOSED IN A SPEECH TO THE NATIONAL CAPITAL SECTION OF AIAA.

THE AEROSPACE COMMUNITY STRONGLY SUPPORTS PRESIDENT BUSH'S FY1991 BUDGET REQUEST FOR NASA, WITH ITS CORE PROGRAMS OF SPACE SCIENCE AND TRANSPORTATION, AS WELL AS SPACE STATION FREEDOM AND ITS VISTION FOR THE FUTURE. IN OUR VIEW, IT CONSTITUTES A SIGNIFICANT AND NECESSARY INVESTMENT IN OUR NATION'S COMPETITIVENESS AND ECONOMIC VITALITY.

WHILE MUCH HAS BEEN WRITTEN CONCERNING THE BENEFITS OF AMERICA'S CIVIL SPACE PROGRAM TO THE WELL-BEING OF MEN AND WOMEN ON EARTH, I WOULD LIKE TO DISCUSS BRIEFLY THE MERITS OF AEROSPACE RESEARCH AND EXPLORATION IN TWO AREAS.

FIRST, THE STATE OF AMERICAN EDUCATION IN THE SCIENCES AND MATH IS A MAJOR NATIONAL CONCERN. YOU AND YOUR COLLEAGUES HAVE SPOKEN FORCEFULLY REGARDING THIS PROBLEM. FOR OUR PART, AEROSPACE COMPANIES ARE KEENLY AWARE OF THE NEED FOR TECHNICALLY COMPETENT PERSONNEL, AND WE ACTIVELY PROMOTE A RANGE OF PROGRAMS TO ADVANCE THE CAUSE OF EDUCATIONAL

EXCELLENCE. THE U.S. CIVIL SPACE PROGRAM, WITH ITS AMBITIOUS AGENDA OF EXPLORATION AND RESEARCH, CAN STIMULATE A NEW GENERATION TO EXCELL IN SCIENCE, MATH, AND ENGINEERING. MOREOVER, A ROBUST SPACE PROGRAM HOLDS THE PROMISE OF FUTURE CAREER OPPORTUNITIES FOR OUR YOUNG PEOPLE.

SECOND, IT IS FROM SPACE THAT THE FRAGILITY AND BEAUTY OF THE EARTH'S ENVIRONMENT COMES MOST CLEARLY INTO FOCUS. IF WE SEE IN SPACE THE CHALLENGE TO EXPLORE, THEN WE SEE FROM SPACE THE EQUALLY GREAT CHALLENGE TO PRESERVE. NASA'S PROPOSED "MISSION TO PLANET EARTH" POINTS THE WAY TO INCREASED OPPORTUNITIES FOR MONITORING AND UNDERSTANDING MANKIND'S MOST FUNDAMENTAL COMMON HERITAGE.

MADAME CHAIR, THAT CONCLUDES MY ORAL STATEMENT. I DO ASK THAT THE JOINT WRITTEN TESTIMONY OF MR. STEENSTRA AND MYSELF BE PRINTED IN THE RECORD, AND I TURN TO MY COLLEAGUE FOR HIS REMARKS CONCERNING THE ISSUE OF NASA'S ROLE IN PROMOTING OUR NATION'S TECHNOLOGICAL COMPETITIVENESS. THANK YOU.

JOINT STATEMENT OF JOSEPH T. MAYER AND HANK STEENSTRA

MADAM CHAIR AND MEMBERS OF THE SUBCOMMITTEE. WE ARE PLEASED TO HAVE THE OPPORTUNITY TO PRESENT THE VIEWS OF A COALITION OF AEROSPACE COMPANIES. WE ARE HERE TO TESTIFY IN SUPPORT OF NASA'S BUDGET REQUEST OF $15.1B AND THE NEED FOR AN ADEQUATE SECTION 302(B) ALLOCATION TO THIS SUBCOMMITTEE.

MADAM CHAIR, LAST YEAR, IN A SPEECH TO THE NATIONAL CAPITAL SECTION OF THE AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS, YOU PROPOSED AN "ALLIANCE FOR THE PLANET EARTH". SUCH AN ALLIANCE, YOU SAID, WOULD BE FOR THE "VETERANS, WHO FOUGHT TO SAVE OUR PLANET; THE HOMELESS, WHO HAVE A RIGHT TO LIVE WITH DIGNITY; THE ENVIRONMENTALISTS, WHO TAKE CARE OF IT; AND YOU (THE SPACE AND SCIENCE ADVOCATES), WHO WANT TO EXPLORE IT."

WE APPEAR ON THIS PANEL AS PART OF THE DIVERSE -- BUT NOT DIVERGENT -- SET OF NATIONAL PROGRAM PRIORITIES WHICH COME UNDER THIS SUBCOMMITTEE'S JURISDICTION. TOGETHER, WE REPRESENT THE ALLIANCE OF WHICH YOU SPOKE.

WE STRONGLY SUPPORT PRESIDENT BUSH'S FY 1991 BUDGET FOR NASA. IT CONSTITUTES A SIGNIFICANT, NECESSARY INVESTMENT IN OUR NATION'S FUTURE DURING A PERIOD OF CONSTRAINED RESOURCES IN THE FEDERAL BUDGET. WE STRONGLY ENDORSE THE CORE SET OF SPACE PROGRAMS CURRENTLY UNDERWAY BY NASA (INCLUDING SPACE SCIENCE AND SPACE TRANSPORTATION PROGRAMS AS WELL AS SPACE STATION FREEDOM) AND THE SPACE EXPLORATION INITIATIVE. WE BELIEVE THAT SUPPORT OF THIS BUDGET IS PARTICULARLY IMPORTANT IN VIEW OF OTHER SHIFTING OF BUDGET DOLLARS.

IT IS CLEAR THAT THIS YEAR WILL BRING A SIGNIFICANT DECREASE IN DEFENSE SPENDING. THERE WILL BE DEBATE ABOUT HOW DEEP THOSE CUTS WILL GO, BUT THERE IS NO QUESTION THAT THEY WILL BE SIGNIFICANT. IT IS EQUALLY CLEAR THAT THE NEXT FEW YEARS WILL SEE THAT DOWNWARD TREND IN DEFENSE SPENDING CONTINUE. WHAT THIS PORTENDS IS THAT CONSIDERABLY FEWER FEDERAL DOLLARS WILL BE SPENT NOT ONLY ON PROCUREMENT OF DEFENSE EQUIPMENT AND ON MILITARY PERSONNEL, BUT ALSO ON RESEARCH AND DEVELOPMENT.

IT IS TO THIS LAST ISSUE -- REDUCED SPENDING ON DEFENSE R&D -- THAT WE WANT TO CALL YOUR ATTENTION. WHEN ONE LOOKS AT WHERE THE BULK OF THIS NATION'S HIGH TECHNOLOGY DEVELOPMENT HAS COME FROM IN PAST DECADES, IT HAS BEEN THROUGH BREAK-THROUGHS MADE COINCIDENT WITH DEVELOPMENT OF NEW DEFENSE PROGRAMS. IT IS THIS VERY HIGH TECHNOLOGY DEVELOPMENT THAT HAS BEEN A MAJOR FACTOR IN ENABLING THE UNITED STATES TO MAINTAIN ITS LEADERSHIP IN THE WORLD AND ITS ABILITY TO BE COMPETITIVE.

AT THE VERY TIME WHEN WE ARE MOST CHALLENGED IN OUR ABILITY TO COMPETE AS A NATION, IT IS MOST INOPPORTUNE TO SEE THE DRYING UP OF FEDERAL RESEARCH AND DEVELOPMENT EFFORTS. THE FACT THAT THIS DECLINING TREND WILL OCCUR IN THE DEFENSE ARENA IS THE VERY REASON WHY IT ABSOLUTELY SHOULD NOT OCCUR IN THE AERONAUTICS AND SPACE ARENA. ASIDE FROM THE DEPARTMENT OF DEFENSE, NASA HAS BEEN THE PRINCIPAL SOURCE OF

NEW HIGH TECHNOLOGY OVER THE PAST SEVERAL DECADES. IF WE ARE TO MAINTAIN OUR EDGE OR IF WE ARE SIMPLY TO KEEP UP WITH THE REST OF THE WORLD, IT IS CRUCIAL THAT WE NOT DIMINISH OUR R&D EFFORTS ON BOTH THE DOD AND NASA FRONTS AT THE SAME TIME. THIS IS THE VERY TIME WHEN NASA OUGHT TO RECEIVE THE FULL FUNDING THAT WAS REQUESTED IN THE PRESIDENT'S BUDGET.

IN ADDITION TO THE VERY PRACTICAL ISSUE OF URGING THAT RESEARCH DOLLARS NOT BE CUT IN NASA WHEN THEY ARE ALSO BEING CUT IN DEFENSE, WE WOULD LIKE TO ADDRESS BRIEFLY THE MERITS OF AEROSPACE RESEARCH AND EXPLORATION IN THREE OTHER PRINCIPAL AREAS.

TECHNOLOGICAL COMPETITIVENESS. THE COMPETITIVE DIMENSION OF WORLD AFFAIRS IS ALSO CHANGING. WHILE AEROSPACE CONTINUES TO MAKE A POSITIVE CONTRIBUTION TO OUR BALANCE OF TRADE, AMERICAN'S PREMIER POSITION IN COMMERCIAL AEROSPACE IS NOT GUARANTEED. WE FACE INCREASINGLY TOUGH COMPETITION FROM OUR EUROPEAN AND JAPANESE ALLIES, AS WELL AS FROM THE SOVIET UNION, THE PEOPLES REPUBLIC OF CHINA AND OTHERS. NASA'S SPACE AND AERONAUTICAL RESEARCH ACTIVITIES WILL HELP TO INSURE AMERICA'S FUTURE COMPETITIVENESS.

EDUCATION. THE STATE OF AMERICAN EDUCATION IN THE SCIENCES AND MATH IS A MAJOR NATIONAL CONCERN. AEROSPACE COMPANIES ARE KEENLY AWARE OF THE NEED FOR TECHNICALLY COMPETENT PERSONNEL AND WE ACTIVELY SUPPORT A NUMBER OF INITIATIVES TO PROMOTE EDUCATIONAL EXCELLENCE FROM GRADE SCHOOL THROUGH GRADUATE SCHOOL. AMERICAN'S CIVIL SPACE PROGRAM, WITH ITS AMBITIOUS AGENDA OF EXPLORATION AND RESEARCH, CAN SERVE AS AN IMPORTANT IMPETUS TO SPARK A NEW GENERATION OF OUR YOUTH TO EXCELLENCE IN SCIENCE, MATH AND ENGINEERING. IT IS NO COINCIDENCE THAT THE APOLLO ERA SAW SUCH A MARKED INCREASE IN THE NUMBER OF TECHNICAL DEGREES AWARDED TO U.S. CITIZENS. A VIBRANT SPACE PROGRAM CAN ONCE AGAIN INSPIRE AND PROMOTE OUR NATION'S EDUCATION GOALS.

ENVIRONMENT. IT IS FROM SPACE THAT THE FRAGILITY AND BEAUTY OF THE EARTH'S ENVIRONMENT COMES MOST CLEARLY INTO FOCUS. NASA HAS TRADITIONALLY PLAYED AN IMPORTANT ROLE IN DEVELOPING SPACE-BASED CAPABILITIES TO MONITOR AND ASSESS OUR GLOBAL ENVIRONMENT. THE PROPOSED "MISSION TO PLANET EARTH" AND ITS CENTERPIECE PROGRAM, THE EARTH OBSERVING SYSTEM, POINT THE WAY FOR A MAJOR CONTRIBUTION TO OUR UNDERSTANDING OF MANKIND'S MOST FUNDAMENTAL COMMON HERITAGE.

IN CLOSING, MADAM CHAIR, WE WANT TO EXPRESS OUR APPRECIATION FOR THE SUPPORT YOU AND THIS SUBCOMMITTEE HAVE PROVIDED TO OUR NATION'S CIVIL SPACE AND AERONAUTICS PROGRAM. WE ARE VERY MUCH AWARE OF THE INTENSE COMPETITION FOR FEDERAL DOLLARS IN THIS TOUGH BUDGET CLIMATE. BUT WE STRONGLY BELIEVE THAT THE ANY MAJOR REDUCTION IN THE NASA BUDGET WOULD BE MOST INAPPROPRIATE, PARTICULARLY GIVEN WHAT IS AND WILL BE OCCURRING TO R&D SPENDING BY DOD. FOR THE SAKE OF OUR NATION'S CONTINUING ABILITY TO LEAD AND TO COMPETE, WE URGE THAT THE NASA BUDGET REQUEST BE SUPPORTED AND THAT THIS SUBCOMMITTEE'S 302(B) ALLOCATION REFLECT THAT PRIORITY.

THANK YOU FOR THIS OPPORTUNITY. WE WOULD BE PLEASED TO ANSWER ANY QUESTIONS YOU MAY HAVE.

STATEMENT OF HANK STEENSTRA, DIRECTOR OF CONGRESSIONAL RELATIONS, TRW

Senator **Grassley**. Does that mean Mr. Steenstra is—you are going to testify?

Mr. **Steenstra**. Yes; I will also.

Senator **Grassley**. OK. You're next. Proceed.

Mr. **Steenstra**. Thank you, Senator Grassley. I am Hank Steenstra, director of congressional relations for TRW.

In addition to what Mr. Mayer has just said, I have really just one additional point I want to make. And that is this. That NASA's budget should not be cut at the same time that the Defense budget is being cut.

TECHNOLOGICAL LEADERSHIP THREATENED

Let me explain. For the past several decades, this Nation has been the beneficiary of an explosion of technological developments, nearly all coming from the high technology research and development efforts of the Department of Defense and NASA. The result has been world leadership in high technology—technology such as computers, electronics, communication, aeronautics, and especially space.

With that technological leadership came a very strong competitive position in the international marketplace. We are all aware of how our technology lead, and with it our ability to compete, has diminished. Unless we are willing to make the investment in high technology research and development, that downward trend in our ability to compete in the international marketplace will accelerate.

Again, the point I want to make is this: The very time when the Defense budget is being reduced is not the time to also reduce the NASA budget request. The reduced investment by the Pentagon in high technology R&D requires that the investment in NASA be increased if we are to have any hope of staying competitive.

Cuts of $1 billion from the NASA request, as assumed in both the House and Senate budget resolutions, are counterproductive to our national interest. For the sake of our Nation's continuing ability to lead and to compete, we urge that the NASA budget request be supported and that this subcommittee 302(b) allocation reflect that priority.

Thank you, Senator.

Senator **Grassley**. Mr. Furtek?

National Aeronautic and Space Administration/National Science Foundation

STATEMENT OF ED FURTEK, ASSISTANT DIRECTOR, WASHINGTON OFFICE, UNIVERSITY OF CALIFORNIA

Mr. **Furtek**. Mr. Chairman, I want to thank the committee for the opportunity to appear here today and I also want to, at this point, mention that Mr. Jack Crowley, representing the American Association of Universities, will not be able to attend. He had a slight accident yesterday. So I'm here somewhat on his behalf as well.

FUNCTION 250 COALITION

I'm the assistant director for the Washington office for the University of California and I'm also the coordinator for a coalition called the Function 250 Coalition.

The Function 250 Coalition is a coalition of educational/scientific societies, professional societies, business organizations, and universities, all working in support of increased national investment in science and technology. The coalition derives its name from and focuses its attention on budget function 250, the part of the Federal budget that funds the bulk of civilian research in the physical sciences, engineering, and technology. This includes budgets for the National Science Foundation, the Department of Energy's General Science Program, and NASA's space research and technology programs.

The coalition stands for the proposition that long-term substantial increases for function 250 are needed to improve science education, strengthen our research institutions, enhance our economic competitiveness, and restore America's leadership in science, space, and technology. The members of the coalition also understand that we cannot advance our goals to secure a better future for America unless the interests of all those groups represented by this committee also succeed in this appropriations process, and we're working together to that purpose.

Senator **Grassley**. Thank you, Mr. Furtek.

Barbara Perry?

STATEMENT OF BARBARA PERRY, ASSISTANT VICE CHANCELLOR FOR RESEARCH, UNIVERSITY OF MARYLAND

TRAINING NEXT GENERATION

Ms. **Perry**. I'm Barbara Perry, the assistant vice chancellor for research with the University of Maryland System. I thank you for this opportunity to comment today.

As you and the committee consider appropriations for 1991, I urge you to consider that the next generation of scientists and engineers is dependent, to a large extent, on the vision and largess of the Congress. At a time of serious budget constraints, it's all too easy to look at the most immediate needs and to put off looking at the future till some distant time.

I ask you to consider that the next generation of scientists and engineers is coming through the pipeline now. This group of scientists which will assist in the conservation and protection of our environment, the economic development of our Nation, and which will help with the health of our aging society needs your continuing support to the research budgets of NSF, EPA, and NASA.

In this technological age, it's critical to maintain the nation's technological strength through trained manpower. This is not the time to give short shrift to science. The HUD/IA Subcommittee appropriates funds to meet immediate demands such as housing, care for veterans, as well as those discretionary activities which control the Nation's future well-being. It's important that all of these programs from Planet Earth receive your support.

Thank you.

Senator **Grassley**. Thank you.

Mr. Bollinger?

DEPARTMENT OF VETERANS AFFAIRS

STATEMENT OF JOHN C. BOLLINGER, ASSOCIATE LEGISLATIVE DIRECTOR, PARALYZED VETERANS OF AMERICA

HEALTH CARE FUNDING

Mr. **Bollinger**. Thank you, Senator Grassley. On behalf of Paralyzed Veterans of America, thank you for inviting us to testify today about VA health care funding.

The VA health care system was once a quality system. The problems the Department faces now are not insurmountable. But the last 4 or 5 years have been absolutely devastating to VA. It must be understood that, of the President's increase of $900 million plus in health care funding, over $400 million will go for salary increases, over $200 million for activation of new but understaffed facilities, and over $200 million for rate changes and inflation. Very little, in fact, will be left over for improvement in actual hands-on patient care.

The Government's investment in VA health care is, we believe, a good investment for the whole Nation, but only if the Department is provided with sufficient funds to care for eligible veterans. If VA can just get back on track, VA's hospitals will once again be able to provide cost-effective health care. If VA continues to flounder, it will result in both bad economics and bad medicine.

When a patient is turned away at the doors of his VA hospital, where does he go? Someone will pay the bill—another Federal program, State or local funding, possibly insurance. But eventually we'll all pay a steep price. We firmly believe that, given sufficient funds, as recommended in our independent budget, the VA's in the very best position to provide quality health care at the best price.

In comparison with other Federal health entities, veterans' health services have not received their equivalent share. Since 1985 Medicare has received a 44-percent increase, Medicaid a 58-percent increase, VA just an 18-percent increase. VA research has actually received 7 percent less. While VA currently treats over 7 percent of the AIDS patients in the United States, VA, for the most part, has been forced to absorb these costs from existing health care dollars.

Medical and prosthetics research has been cut by $14 million for fiscal year 1991. As we speak, individual VA hospitals continue to suffer residual deficits, ranging from $1 million to $4 million, even after their share of the 1989 supplemental appropriation.

Multimillion dollar backlogs, ranging in value from $1 to $17 million, of needed but unpurchased equipment, and other extreme shortfalls in funding exist in most of VA hospitals today. We have a long way to go and we urge you to adopt our recommendations as set forth in the independent budget.

Thank you very much.

[The statement follows:]

STATEMENT OF JOHN C. BOLLINGER

Madam Chairman and Members of the Subcommittee, Paralyzed Veterans of America (PVA) thanks you for inviting us to testify today concerning the Fiscal Year 1991 appropriation for the Department of Veterans Affairs (DVA). We will focus our comments on proposed FY 1991 funding levels for the DVA as recommended by the President and as recommended in our own Independent Budget.

Before we examine the President's proposed FY 1991 budget for the DVA, we wish to provide the Subcommittee with a brief assessment of where the agency's health care system is today following the supplemental appropriation for FY 1989.

Several months ago, Independent Budget staff conducted a telephone survey of 24 representative VA medical centers. Survey questions were designed to elicit information on any continuing impact of a residual 1989 funding shortfall and the system's ability to handle the projected continuing shortfall in 1990. Every hospital surveyed reported that deficits were still being absorbed by workload cutbacks and use of funds intended for equipment purchase, building maintenance and repair, personnel salaries and contract health care services, such as community nursing homes. In the latter case, facilities cut utilization between 10 percent and 50 percent.

Most hospitals reported:

o A residual deficit, ranging from $1 to $4 million per hospital, after receiving their share of the belated 1989 supplemental appropriation.

o Multi-million dollar backlogs, ranging in value from $1 to $17 million in needed but unpurchased equipment.

o Between 20 and 50 nurse vacancies per hospital - particularly in intensive care.

o Waiting times of more than three months for certain specialty clinics (some clinics had a six month backlog).

o Projected funding shortfalls in FY 1990 ranging from $40,000 to $50,000 for prosthetic services and equipment (from wheelchairs to leg braces) - even though FY 1989 non-recurring supplemental dollars were invested in prosthetics.

o In every hospital surveyed, poor employee morale.

Fiscal Year 1990 Supplemental

We appreciate the action of this Subcommittee and the entire Senate in approving a fiscal year 1990 supplemental appropriation for VA health care in the amount of $94 million. The additional funds will be help increase staffing levels and bridge such levels from this year to the next. Current estimates indicate that total year shortfalls are running in excess of $250 million. We therefore urge the Members of this Subcommittee and the full Committee to strongly promote the Senate figures as you proceed in conference on the bill.

Administration's FY 1991 Budget Proposal

The Administration's request for VA funding represents an approximate 8 percent increase in medical care over this year. In comparison with all other federal health entities, veterans' health services have not received their fair share of federal health dollars to keep up with the rising cost of medical care. For instance, since 1985 Medicare has received a 44 percent increase; Medicaid received a 58 percent increase. Veterans' health care has received only an 18 percent increase. VA research has received 7 percent less during this time. Discounting for inflation entirely, VA funding during this period has actually been decremental. The point we are making is that the proposed 8 percent increase for medical care in FY 1991 is welcome, but it does not solve the problem that we face.

It is important to understand that although the President's FY 1991 budget proposal would increase the requested budget authority by $1.2 billion over the FY 1990 level, $946 of that amount is required to cover increased salary costs, inflation, and the activation of newly completed facilities. Little remains of the $1.2 billion to address the substantial erosion of health care experienced in FY 1989 and FY 1990. And little remains to address the burgeoning medical equipment backlog, the inadequate agency performance in the adjudication of veterans' claims, and the need for nursing home beds within VA. Further, the backlog of prosthetics equipment and supplies, the backlog of VA cemetery equipment, and a host of other significant problems cannot be adequately addressed by the Administration's proposed funding levels which are "better than they were under President Reagan".

The Independent Budget recommends a medical care budget level of $13 billion just to meet current services requirements. Our total recommendation for medical care is $13.4 billion. An explanation of how we derived this figure is contained in the Independent Budget document. We believe our recommendations for FY 1991 are accurate appraisals of what the Department will actually need next year to make up accumulated lost ground and maintain the quality and quantity of health care and benefit delivery.

Health Care Staffing

More than 60 percent of direct health care costs are related to personnel expenditures. The Administration's budget calls for 2,837 additional FTEE in FY 1991. However, the budget proposal reveals that 2,098, the vast majority of those FTEE, are requested to staff newly activated facilities, not to augment the existing system where thousands of beds have been closed do to lack of staff, particularly nursing staff. Only half of the remaining 739 additional FTEE are to be allocated to the existing hospital system. The remainder are to be sent to fill needed nursing home positions.

Direct Patient Care Costs AIDS Patients

The President's budget proposal for FY 1991 highlights an additional $50 million for AIDS treatment. However, this represents a shift from other medical care resources, rather than a request for new funding to support the anticipated increased workload to care for patients with AIDS. The Senate Committee on Veterans' Affairs has recommended a $50 million increase for FY 1991 to help cover part of increasing expense in caring for AIDS patients. We strongly support that recommendation.

Medical and Prosthetics Research

The Administration's FY 1991 proposed budget for medical and prosthetics research will decrease both funding and FTEE for this important program. Reduced by $13 million below the FY 1990 appropriated level, the program will be unable to start many new research projects as well as force cutbacks in commitments to on-going projects. The President's proposal is approximately $55 million less than that recommended in our Independent Budget. We urge you to reject the Administration's figures and restore sufficient funding for this vital program.

DVA Construction

The Administration has requested a total of $694,467,000 in major and minor construction for FY 1991. Given the 86 year replacement cycle on which DVA facilities are operating, this funding level for FY 1991 will be far short of that needed to address the current nationwide requirements for construction and maintenance shortfalls. Changing technologies and demographics will further require modern state-of-the-art facilities. The Independent Budget recommendation of $970,750,000 for this account will be necessary to meet these current and future challenges.

Post-traumatic Stress Disorder (PTSD)

The President's budget request contains no increase in funding for PTSD treatment services for Vietnam Veterans despite the findings of VA's own major study of the Vietnam veteran population which indicated that 479,000 male Vietnam veterans currently have full-blown cases of PTSD. We recommend the addition of $12.4 million in funding for this critical program.

Physicians and Dentists Pay

The House and Senate Committees on Veterans' Affairs have introduced legislation to provide a long-overdue increase, including special pay rates, for VA physicians, dentists, and nurses. Without immediate action, however, VA could very well face losing a substantial portion of these professionals over the next several years due to existing pay inequities and retirement inducements. Both Committees agree that an additional $30 million will be required to correct the existing problem.

Madam Chairman, PVA greatly appreciates this opportunity to testify today. I would be happy to answer any questions you might have.

Senator MIKULSKI [presiding]. Thank you, Mr. Bollinger.

First of all, I want to welcome everyone here. I want to thank you for your testimony, Mr. Bollinger. We want to particularly thank the role that the paralyzed veterans played, No. 1, in not only serving their country, for which we are most grateful, but in a special role that you play in pulling together the independent budget of the veterans' organizations that really has provided extraordinary insight and information for this committee to properly meet our veterans' obligations.

I want to just express my special thanks. With Memorial Day coming up, it's very nice to thank vets with parades and so on, but I think you match days with deeds. We look forward to really taking an aggressive approach in the veterans' budget, and particularly in veterans' health care. So we want to give you special thanks.

Mr. BOLLINGER. Thank you very, very much, Madam Chair.

Senator MIKULSKI. And, of course, to all those who testified. I also want to acknowledge that the fifth grade of Whetstone Elementary School is here from Montgomery County; is that right?

Where are the Whetstoners?

[A show of hands.]

Senator MIKULSKI. Well, I feel very close to Whetstone Elementary. You might say, why would Senator Mikulski feel close to the fifth grade at Whetstone?

Well, if I were out in the audience, I guess I'd be about your height. [Laughter.]

But that's not why I feel close. We see eye to eye, kids; let's put it that way. But, in addition to being the U.S. Senator from Maryland, I'm also affectionately known as Aunt Barb to three kids by the name of Liszewski, who live in Montgomery Village, one of whom is a young man who graduated from Whetstone Elementary and will be graduating from college in January.

Then there's my niece Val, who graduated from Whetstone Elementary and now is in her third year—starting her third year at the University of Rhode Island, a gymnastics scholar. We—the gals in my family know how to hit the high bars.

And then there's young Mike Liszewski, who's now in junior high, who graduated recently. And he's a star baseball player. So I know all about Whetstone. You have a great faculty. You have a great school. And if you study hard and eat your vegetables, don't smoke, and just say no, you might just have this job someday. And it's not bad, I'll tell you.

What I like about being a Senator is you get a chance to do a lot of good for a lot of people. And what we're doing here today is listening to the people present their views, the needs on our budget, to show that in this country you don't have to be rich and you don't have to be famous in order to have access to talk to the U.S. Senate.

So that's why the men and women at this table, and who testified before—one of your Montgomery County residents, Gil Lessenco, was here, talking about the sanitation commission—big environmental issue. Everybody wants to do something about global warming and ozone depletion. We want to make sure that the plumbing works in Montgomery County and in our metropolitan area.

Gil, we thank you for coming, and I'll pay special attention to your testimony.

So, kids, that's why we're here. I'm going to go on doing my job and we're now going to—Mr. Mayer has testified from Rockwell, and Mr. Steenstra has testified from TRW, Mr. Furtek, right over there, Barbara Perry from the University of Maryland, and Mr. Bollinger. So that really completes our panel. We understand that Mr. Scott Sklar from Solar Industries, is he here?

[No response.]

Senator MIKULSKI. OK. And Mr. Savage, from the Interstate Water Pollution, are they here? They were from the previous panel.

Well, we're going to go right on to our panel. Again, we want to thank the people that testified. We'll be reviewing all of their testimony and we're now going to move on.

We're now asking our next panel to come forward. Mr. Dickson of the Izaak Walton League; Ms. Eichmiller; Mr. Gennaro from Friends of the Earth; Mr. Lowe from the Conference of Mayors, Gordon Cavanaugh from Public Housing; and Gail Cincotta, People's Action.

We're moving at a very crisp pace, and this is the part of our testimony that really concerns our commitment to our planet and to our poor. And we really look forward to the testimony.

We're going to focus first on the people part and then on the planetary part. But both are in a fragile and endangered situation.

Ms. Cincotta, I'm going to ask you to lead off your testimony for the panel so that we can get the perspective of what's happening out there in the streets and neighborhoods. And I know you particularly want to offer some suggestions on the FHA. But I know this lady; we're old barricade partners together. So, please, the Senate welcomes you and we look forward to your testimony.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

STATEMENT OF GALE CINCOTTA, EXECUTIVE DIRECTOR, NATIONAL TRAINING AND INFORMATION CENTER

Ms. CINCOTTA. Thank you. Thank you very much. My arthritis was kicking up last year, so I had to do my talking by the telephone. But I'm here this year.

We're hoping very much that the—first of all, we support CDBG to its fullest funding. In fact, if you can double it, we'd be happy, and all the programs for low- and moderate-income folk.

On the HUD/FHA problem, last year we battled royally, all of us, trying to fight the cap—keeping the cap on the FHA limits. One of the things that we knew was attractive to appropriations was that now they frontload the insurance fund 3.6, which brings in some money that you can therefore use for other funding within your committee.

But when they frontload that cap, what they also do, is that it ends up in—most of the insured mortgages are, like, for 105 percent or 110 percent of value. With it being frontloaded, it gives some money that you can deal with, but it also leads to high foreclosures. I brought two sheets of paper that I hope that you're be interested in—the FHA single-family claims by fiscal year. And they have the new 1989 figures also.

Last year, when we were saying keep the cap on, there were 95,844 claims paid, over $5 billion. This is not a cumulative list; it's an every year list. In 1989, there were still almost 91,000 claims paid; foreclosures, almost $5 billion. What we're asking, instead of just looking at the cap, is to help us clean up FHA to where we had it, where we were down in 1979-80 to only 19,000 claims. Therefore, if you had half a billion——

Senator MIKULSKI. Excuse me. By claims, you mean foreclosures; is that correct, Ms. Cincotta?

Ms. CINCOTTA. Foreclosures and claims—it says total claims paid. They paid that many claims that year.

In 1980 we had it down to 19,000; now it's up to past 90. And if we could work on where you clean up the FHA without hurting anybody, then you could have $5 billion that we could together spend on low-income housing. But it's frightening to look for that short-sighted—that quick-fix on money when it leaves us with a $5 billion debt just on the FHA program last year and leaves our neighborhoods decimated with FHA-abandoned buildings.

So that we would really urge you to look at the cleanup we've proposed. It wouldn't hurt anybody but people who are stealing from the Government. Fraud—people who are involved in fraud. People who sell people a dream and then the people are out in the street in 6 months. It wouldn't hurt business; it would help our neighborhood and would give us all more money for housing for low-income folks.

I see the red light; I'll stop.

[The statement follows:]

STATEMENT OF GALE CINCOTTA

Ms. Chairwoman, I thank you for the opportunity to testify before you, and the members of the Senate Subcommittee on HUD, VA, and Independent Agencies. My name is Gale Cincotta and I am Executive Director of the National Training and Information Center, a resource and training center for neighborhood-based organizations, and Chairperson of National People's Action, a national coalition of grassroots community groups.

HISTORY

For twenty years we have seen neighborhoods across the country devastated by mortgage bankers and realtors engaging in abusive FHA lending. Our involvement in the FHA issue over the years has led to widespread reform of the system, including: indictments by the Justice Department of Realtors, bankers, builders, and inspectors; the 518 A and B payback program; the Mortgage Assignment Program; and the Repair and Sell Program in Cleveland and Chicago. That program repaired and sold hundreds of homes in each city, and total effect of the effort was to reduce the inventory of vacant FHA buildings down to 19,000 properties. The data for 1988, after staff cuts and the discontinuation of the Repair and Sell program, shows the HUD inventory at 95,000 vacant FHA buildings. In certain neighborhoods in Chicago (and certainly in other cities) the cycle of foreclosures is back in full swing. (The Repair and Sell program, incidentally, is the only program that ever earned revenues for HUD and the FHA.)

The National Training and Information Center was also instrumental in passing the Community Reinvestment Act (CRA), and the Home Mortgage Disclosure Act (HMDA). HMDA data, which should have provided a means for community groups to obtain concrete evidence of redlining they knew was occurring in their neighborhoods, has not been available for FHA lending for the last nine years. HUD has neither gathered, analyzed, nor released the lending data since 1980. The data for conventional lending by S&L's, however, has been available since 1975.

FHA REFORM

The FHA has historically provided homeownership opportunities to great numbers of Americans who otherwise would not have had such opportunities. Abuses of the FHA program have, however, also been responsible for the total destruction of many inner-city neighborhoods all over the country, and for the loss of many homes and homeownership opportunities. A new wave of destruction is moving in on inner-city neighborhoods again, thwarting the efforts of non-profit community developers to bring back areas which were once stable communities. The only way to break the cycle of foreclosure and neighborhood destruction is to institute the following reforms, before any thoughts of expanding the FHA are entertained:

1. LIMIT LOAN-TO-VALUE RATIOS TO 97%

One major cause of the high foreclosure rates is the practice of lending more than the collateral property is worth. Often FHA lenders allow borrowers to roll in closing costs, which results in loan-to-value ratios up to 105% or even 110%. This represents a great danger to the borrower who has no equity interest in the property, and who cannot recoup the mortgage amount by selling the house, and to the FHA which must swallow the loss in the even of a default. This is a very common scenario in our neighborhoods, and we therefore feel strongly that a policy of enforcing loan-to-value ratios no higher than 97% under the FHA program is crucial.

2. TARGET FHA TO BORROWER INCOME

Rather than indexing the FHA ceiling to home prices, the loan limit should be a function of borrower income. The FHA, in order to fulfill its purpose of opening up homeownership opportunities for low- and moderate-income families, should be limited to serving families whose incomes do not exceed either 115% of area median, or 125% of state median household income.

3. DISCLOSE FHA LENDERS' FORECLOSURE RECORDS TO THE PUBLIC

Unscrupulous use of the FHA program, especially careless or fraudulent underwriting, is responsible for high rates of fast default and foreclosure leading to quick turnover of houses, abandonment, and destruction of neighborhoods. Abuse is well-known, and concentrated in certain geographic areas.

Communities must be empowered to put a stop to such practices,and can only do so with the concrete evidence of lending data. A quarterly list of defaults and foreclosures by lender and census tract, including the date of the loan's origination, must be made available by HUD to the public. Like CRA and HMDA, this disclosure must provide a mechanism for community groups to trigger investigations of lending abuse in their neighborhoods.

4. PENALTIES FOR ABUSE OF THE FHA PROGRAM

To follow up on the disclosure and investigation of bad lending, HUD must have the ability to suspend or revoke lenders' FHA lending privileges, or cut them off of the direct endorsement program when patterns of abuse are revealed. This must be possible, even if a lender's overall record (covering a larger geographical area than that experiencing high foreclosure) looks acceptable.

5. AUTHORIZE MORE FUNDING FOR MONITORING AND COUNSELING

Because of the persistent abuse of the FHA program, reforms without monitoring and educated homebuyers will never be sufficient. Therefore, more funding is needed for both HUD monitoring staff, and for pre-purchase and default counselling for homebuyers.

6. REQUIRE HUD AND LENDERS TO NOTIFY DELINQUENT BORROWERS OF THE MORTGAGE ASSIGNMENT PROGRAM

Homeowners who fall into delinquency often lose their homes needlessly due to lack of, or misleading, information received in letters from the mortgage holder. HUD and the lender should both be required to inform delinquent borrowers directly and immediately that they can apply for the Mortgage Assignment Program and very likely save their home, before they receive threatening letters from the mortgage holder. The assignment program allows homeowners to defer payment of their mortgage as much as 38 months, or restructure their payments in some other helpful way. Borrowers should also be given the name and number of the counselling agency nearest them.

7. ELIMINATE EXTRA POINTS CHARGED FOR SMALLER LOANS AND INSTITUTE A LEVEL GINNIE MAE SERVICING FEE

Because mortgage lenders receive their servicing fees as a percentage of the loan amount, there is a built-in bias to make larger loans. As a result, many lenders either have illegal minimum loan amounts or discriminate by charging borrowers higher origination fees (up to 5 extra points) on smaller mortgages. An even servicing fee would remove the incentive to make only larger loans or make small loans but discriminate by charging higher fees, because it would compensate the lender for the less lucrative loans. It would do this by assuring the lender of a fair fee on every loan, regardless of size. Under this proposal, the lender would receive a servicing fee of .44% of the national average FHA loan amount for every loan made, regardless of its size. Borrowers would still pay .44% of their own mortgage amount, but GNMA would redistribute the funds so lenders received a uniform fee per loan.

8. LIMIT FHA TO FIRST-TIME HOMEBUYERS

To keep the FHA in the service of those families who need help breaking into the housing market, the FHA should be limited to first-time homebuyers or those who have not owned homes in the last three years.

POLICY CHANGES WHICH MUST BE AVOIDED

Besides the reforms that are needed to end the abuse of FHA and resulting catastrophe of abandonment and neighborhood destruction, there are proposals for changes in FHA policy which either recur, or persist, and which must be resisted, as they would only serve to aggravate discrimination in lending and increase the rate of foreclosure.

9. DO NOT RAISE THE FHA LOAN LIMIT, AND PARTICULARLY NOT IN THE APPROPRIATIONS COMMITTEE.

When the FHA ceiling is moved up, the floor moves up with it. Surveys conducted by NTIC in 1989 of the 7 largest FHA lenders in the country and of major lenders in Chicago, Philadelphia, Milwaukee, and Cleveland show that mortgage lenders discriminate by imposing illegal minimum loan amounts below which they will not lend, and by charging extra points and fees to originate smaller loans. (Fig.s 1 and 2). Mortgage bankers prefer to make larger loans, so the higher the ceiling goes, the more people will be shut out of the housing market. In some cases, the minimum loan amounts are already as high as $60,000. A raise in the FHA loan limit will only reinforce this practice.

The current temporary FHA limit is $124,875. In order to afford the monthly payments on a house costing more than that, a family would need an income of at least $50,000 to $63,000. Ninety percent of Americans earn less than $63,000 per year. So who would benefit from a raise in the FHA limits? The wealthiest ten percent of America's population. This is hardly the segment of population to target if increasing homeownership in America is one of our goals. A 1989 report by the Harvard Joint Center for Housing Studies shows that 89% of households with annual incomes over $50,000 own at least one home (fig. 3, FACT 1). Households with such high incomes can easily obtain financing in the conventional market, and have no need of government insurance.

Considering the financial state of the FHA, and its worsening record on foreclosures over the last ten years, this is a very unwise time to expand the agency's operation. According to HUD data, $5.1 billion in claims was paid in 1988 to cover 95,844 foreclosures. The figure in '87 was 3.8 billion dollars. These are considerable increases from 1978 and '79, when just $621 and $586 million respectively was paid in single-family claims. (Fig. 4). These figures are also reflected in the GAO's 1989 report on the completed 1988 Price Waterhouse audit of the agency. The audit reports losses of $4.2 billion for the FHA in 1988, $1.4 billion of which was incurred by the single-family insurance program.

Insuring larger loans would expose the FHA to larger losses when defaults occur. This is supported by the 1989 GAO financial audit of the FHA which states: "When higher value loans default, losses might be higher than they are on lower value loans. Private mortgage insurers contend that loss rates rise with loan size..." (Fig. 5). Those who argue that premiums paid for new insurance would bring in helpful revenues, are ignoring the increased costs a few years in the future which inevitably will be incurred by new foreclosures. It would be wise for the FHA to clean house before it expands its operations.

One argument says the limits must be raised because more expensive housing markets are undeserved by the FHA. California, one of the most costly markets in the nation consistently ranks first in state distribution of FHA loans. A 1989 report by the Congressional Research Service shows that in 1988, and cumulatively since 1934, the state of California ranks first in its percent share of FHA loans made in the 50 states, in the number of loans made, and in the dollar amount of FHA lending. (Fig.s 6 and 7). In 1988, California go 1 out of 6 FHA loans. (Fig. 8)

Another common argument claims that in high-priced markets, people who want to buy starter homes cannot afford to get into the housing market, because they can't get FHA loans on such high-priced homes. This argument makes no sense. If you cannot afford a home, an FHA loan will not make it more affordable. An FHA loan will lower your downpayment (although conventional 5% down loans do exist), but it will also raise your monthly mortgage payment. An FHA loan will not make an expensive house cheaper. If you want to buy a house requiring a loan over $125,000, you must have the income to support the monthly payments on such a large mortgage. In fact, you need a higher income to support the monthly payments under FHA precisely because the downpayment is so low.

The only advantage an FHA loan will bring, is that you do not have to save as long to accumulate a downpayment. That is plainly an advantage for wealthy first-time homebuyers who lack the patience to save. Families earning over $63,000 dollars a year should have far more discretionary income than those earning under $40,000, and consequently, should be better able to save for higher downpayments. There is no reason the federal government should put its resources at risk to insure loans for such wealthy families who have ample access to lending resources in the conventional market.

10. DO NOT RAISE THE LIMIT EVEN WITH 10% DOWN ON LOANS OVER $124,875

Borrowers who need larger loans can get conventional financing, especially if they are willing to put 10% down. Why bring in government insurance with its greater default risk, and costs to the taxpayers?

11. DON'T GIVE TAX BREAKS ON IRA FUNDS WITHDRAWN FOR DOWNPAYMENTS

The proposal in S. 566 which would permit the withdrawal of IRAs for use as downpayment funds is fine for those families who possess IRA's so long as they are still required to pay the taxes due on the funds withdrawn. But clearly, the proposal does not touch the population of low- and moderate-income families which the FHA should serve, and whose share of the homeownership market is dropping.

The Harvard study also shows that from 1985-'88 the proportion of first-time homebuyers with incomes under $40,000 decreased 17%, from 59% to 42%. The national average income is slightly under $40,000. The study also shows that only those with incomes exceeding $35,000 a year have enjoyed rising rates of homeownership since 1974. (fig. 9)

12. DON'T USE ADJUSTABLE RATE MORTGAGES UNDER FHA

Adjustable Rate Mortgages also present a great danger to FHA borrowers and to the FHA fund. ARM's presuppose predictable, rising incomes, and considerable property appreciation. In many FHA neighborhoods, this is not a fair assumption. ARMs would cause a ferocious rise in the default rate, and, consequently, in FHA losses.

13. DON'T "GREENLINE"

The proposal to "Greenline" lower-income neighborhoods is also a recipe for foreclosure disaster. This proposal, meant to aid inner-city neighborhoods, is vehemently opposed by neighborhood groups and advocates. "Greenlining" calls for giving forward commitments for FHA lending to S&L's and banks, and the inundation of certain subscribed areas with FHA lending. In Chicago and the South Suburbs (and in other cities, such as Cleveland), we already have a situation where certain neighborhoods are 100% government underwritten.

We DO NOT WANT any more areas of FHA concentration, and the FHA cannot afford it. We DO NOT want forward commitments for FHA lending to S&L's and banks. Under CRA they are required to lend in inner-city neighborhoods. Why should they lend only FHA? Let them lend conventionally--it's their business. We need a blend of FHA and conventional loans in all our neighborhoods.

CONCLUSION

Inner-city neighborhoods around the country have been suffering from wave after wave of foreclosure. When they finally are able to recover from one round of devastation, due to the efforts of community groups or innovative HUD programs, they are beaten back by a second round, as programs are cut. The devastation suffered by huge areas of Chicago and its South Suburbs are representative of the plight of many of our large cities. Communities will never recover from the destruction and destabilization of fraud, lack of supervision, and unsound lending practices under the FHA, unless the determination exists to put in force sensible reforms with the proper institutional support. Until the profound problems inherent in the FHA's structure are fixed, it would be foolish and perilous both to communities and to the FHA fund to expand its lending authority.

Thank you again, Ms. Chairwoman, for this opportunity to testify.

FIGURE 1

NTIC called the top ten mortgage companies nationwide, as reported by American Banker as of June 30, 1988. Of the seven that provided FHA loans, all seven charged additional points for lower-balance FHA loans. Extra points charged by these lenders varied markedly, from ½ extra point by Fleet Mortgage in Milwaukee, to 3 extra points by Commonwealth Mortgage in Houston and First Union Mortgage Corporation in Charlotte.

MORTGAGE COMPANY	EXTRA POINTS	LOAN OFFICER	PHONE
1. Citicorp, St. Louis	Don't do FHA loans		314-851-5100
2. GMAC, Philadelphia	1½ points extra on loans under $25,000	Joe Yenfer	215-886-4622
3. Lomas & Nettleton, Dallas	Don't do new loans		214-263-7911
4. Fireman's Fund, Lansing,	1 point extra on loans under $35,000	Ron Hark	517-321-5858
5. Fleet Mortgage, Milwaukee	½ point extra on loans under $30,000	Carolyn Perkins	414-476-9660
6. Commonwealth Mortgage, Houston	3 points extra on loans under $35,000	see attached rate sheet	
7. Goldome Mortgage, Buffalo	2 points extra on loans under $40,000	Dianne Cross	716-635-7000
8. Metmor Mortgage, L.A.	Don't do FHA loans		800-323-7870
9. Banc Boston Mortgage, Jacksonville	2 points extra on loans under $25,000 1 point extra on loans under $40,000	Tom Callahan	904-724-1353
10. First Union Mortgage Co., Charlotte	3 points extra on loans under $35,000	Will Gaines	704-374-6801

FIGURE 2

August 1989

National People's Action called the top five FHA/VA mortgage lenders in Philadelphia. All five discriminate against borrowers of smaller FHA loans. One company --- Aurora Financial --- charges over $1,000 extra for a loan under $35,000. The second largest company, E.B. Mortgage/Consolidated Mortgage, has a minimum $25,000 loan amount, which is illegal.

	MORTGAGE COMPANY	MARKET SHARE	PENALTY POINTS	LOAN OFFICER	PHONE
1	Margaretten	14.4 %	½ point extra on loans under $35,000 1½ points extra under $30,000 2 points extra under $25,000	Jack Gaez	565-4610
2	E.B. Mortgage	9.4 %	No extra points for small loans MINIMUM LOAN AMOUNT: $25,000	Jerry Barr	664-3292
3	Travellers Mortgage	8.8 %	2 points extra under $30,000		640-1680
4	Aurora Financial	7.5 %	2 points extra under $45,000 3 points extra under $35,000	Mary Beth Deflece	609-596-6200
5	Commonwealth Mortgage		1 point extra under $40,000 1½ points extra under $35,000 2 points extra under $25,000	John Joyce	1-800-322-7576

August 1989

National People's Action called the top five FHA/VA mortgage lenders in Cleveland. All five discriminate against borrowers of smaller FHA loans. One company charges as much as 5 points extra --- that's $1,250 extra on a $25,000 loan!

	MORTGAGE COMPANY	MARKET SHARE	PENALTY POINTS	LOAN OFFICER	PHONE
1.	Colony Mortgage	9.65 %	1 point extra on loans under $45,000	Matt Teifke	621-8850
2.	Freedom Mortgage	7.49 %	½ point extra on loans under $60,000 1½ points extra under $40,000 2½ points extra under $30,000	Bill Cosgrove	749-0700
3.	Assured Mortgage	5.54 %	1 point extra on loans under $50,000 2½ points extra under $30,000	see attached rate sheet	

4.	Centrust Mortgage	5.66 %	2 points extra on loans under $25,000	Joe	642-3886
5.	Great American	5.54 %	2 points extra on loans under $40,000 3 points extra under $30,000 5 points extra under $25,000	?	449-6801

National People's Action called the top five FHA/VA mortgage lenders in Chicago. All five discriminate against borrowers of smaller FHA loans. One company --- Margaretten --- charges as much as five extra points for small loans. Several companies reported that they have minimum loan amounts, which are illegal.

	MORTGAGE COMPANY	MARKET SHARE	PENALTY POINTS	LOAN OFFICER	PHONE
1.	Margaretten	13.3 %	½ point extra on loans under $45,000 1½ points extra under $30,000 2 points extra under $25,000 3½ points extra under $20,000 5 points extra under $15,000	Jenny Schumann	775-9401
2.	Centrust	[illegible].7 %	½ point extra under $35,000 MINIMUM LOAN AMOUNT: $25,000	Steve Molitor	965-1090
3.	Midwest Funding	7.0 %	½ point extra under $40,000 MINIMUM LOAN AMOUNT: $30,000	Tom Rogos	361-6300
4.	Crown Mortgage	6.4 %	2 points extra under $40,000, must be approved by President		599-9000
5.	West America	5.6 %	½ point extra under $40,000 1 point extra under $35,000 1½ points extra under $30,000 2 points extra under $25,000		974-2400

Market share data: Mortgage Data Services, Washington, D.C.

August 1989

National People's Action called the top five FHA/VA mortgage lenders in Milwaukee. All five discriminate against borrowers of smaller FHA loans. One company --- Margaretten --- charges over five extra points, which is more than $1,000 extra on a $20,000 loan. Other companies impose illegal minimum loan amounts.

	MORTGAGE COMPANY	MARKET SHARE	PENALTY POINTS	LOAN OFFICER	PHONE
1	Security S & L	17.6 %	½ point extra on loans under $35,000 1 point extra under $25,000 1½ points extra under $20,000	Joe Henika	453-4111
2	Margaretten	9.6 %	1 point extra under $35,000 3 points extra under $30,000 4 points extra under $25,000 5½ points extra under $20,000 No loan under $15,000	Dennis O'Hare	258-1177
3	Fleet Mortgage	8.9 %	¼ point extra under $30,000	from rate sheet	
4	Shelter Mortgage	8.0 %	½ point extra under $40,000 1 point extra under $30,000 1½ points extra under $20,000	Mike Stack	355-6608
5	Universal Mortgage	6.6 %	1 extra point or more under $25,000	Cliff	273-1776

FIGURE 3

HOMEOWNERSHIP FACTS

FACT 1: MOST FAMILIES THAT CAN'T AFFORD TO BE HOMEOWNERS HAVE INCOMES UNDER $40,000 A YEAR. RAISING THE LIMITS WON'T HELP THEM.

Since 1974, homeownership rates fell for households with incomes less than $17,500 a year. They rose significantly for households with incomes over $50,000 a year. 89% of these households earn at least one home.

Source: Harvard Joint Center for Housing Studies, 1988.

From 1985 to 1988 the percentage of families earning less than $40,000 a year who became first-time homebuyers fell 19%, to 40%. The same figure went up 7% for families earning $40,000-$60,000, and 12% for incomes above %60,000.

Source: Chicago Title and Trust 13th Annual Survey of Recent Homebuyers

FACT 2: FALLING HOMEOWNERSHIP RATES ARE DUE TO THE FACT THAT MONTHLY HOUSING COSTS ARE TOO HIGH, NOT THAT DOWNPAYMENTS ARE TOO HIGH.

For first-time buyers in	1976	1988	
average monthly payment	$313	$929	
payment as % of income	23%	35%	UP
ave. time to save downpayment	2.4 yrs	2.4 yrs	SAME
ave. downpayment	18%	15%	

Source: Chicago Title and Trust 13th Annual Survey...

FACT 3: INCREASING THE FHA LIMIT WOULD NOT MAKE EXPENSIVE HOMES MORE AFFORDABLE.

for first-time buyers in	New York	Memphis
median home price	$181,200	$61,200
average monthly payment	$1,310	$585
payment as % of income	47%	29%
average downpayment	22%	10%

Source: Chicago Title and Trust 13th Annual Survey...

FAMILIES IN HIGH-COST AREAS HAVE TO SAVE LARGER DOWNPAYMENTS TO LOWER MONTHLY HOUSING COSTS TO AFFORDABLE LEVELS.

The minimum income needed to buy a median-priced starter home in New York with 20% down is $68,000. With 5% down, the minimum income rises to $79,000.

FIGURE 4

FHA
SINGLE FAMILY CLAIMS
BY FISCAL YEAR

FISCAL YEAR	TOTAL CLAIMS PAID NUMBER	AMOUNT	AVERAGE CLAIM AMOUNT
1978	26.444	621,838.078	23.515
1979	22,508	586,284.277	26,048
1980	19.436	511,493.703	26,317
1961	19,115	624.722.903	32.682
1982	22.329	709,139.429	31,760
1983	33,058	1.261,801.977	38,169
1984	38.599	1.575,760.013	40.824
1985	49,963	2,094,369,949	41,918
1986	54,708	2.612.954.974	47,762
1987	72,729	3.830,641,522	52.670
1988	93,644	5.189,311.185	54,143
1989	90.927	4,914,721,843	54,051

FIGURE 5

U.S. GAO 1988 FINANCIAL AUDIT: FEDERAL HOUSING ADMINISTRATION

The fiscal year 1988 financial audit has just been completed. FHA's financial statements show losses of $4.2 billion in fiscal year 1988 and that the government's equity sunk to a deficit of $2.9 billion at the end of the fiscal year. The information provided by that audit gives cause for substantial concern. In summary,

-- FHA's Mutual Mortgage Insurance Fund, its largest fund, incurred a loss of $1.4 billion in 1988, causing its equity to diminish to $1.8 billion

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-- When higher value loans default, losses might be higher than they are on lower value loans. Private mortgage insurers contend that loss rates rise with loan size. For example, in a weakened market, a $150,000 house might decline to $120,000, or 20 percent, while a $100,000 house might decline only to $90,000, or 10 percent.

-- There has been a lack of effective monitoring of those program activities delegated to the private sector,

-- Financial information needed to properly manage FHA's programs has not been available,

-- Important internal controls are not effective, particularly with regard to cash management and the processing of multifamily insurance claims,

-- Essential accounting function have not been performed adequately, and

-- Management has not been diligent in correcting the weaknesses identified in earlier reviews.

FIGURE 6

TABLE 7. State Distribution of FHA-Insured Mortgages, 1988 and Cumulative since 1934.
(by Number of Loans)

	1988	%	Rank	Cumulative	%	Rank
Alabama	8,647	1.2	25	269,172	1.6	22
Alaska	2,524	0.4	42	30,278	0.2	48
Arizona	25,578	3.7	10	551,708	3.2	10
Arkansas	7,964	1.1	26	146,187	0.8	33
California	80,766	11.5	1	2,582,548	15.0	1
Colorado	27,750	4.0	8	440,876	2.6	13
Connecticut	2,564	0.4	41	135,226	0.8	36
Delaware	1,154	0.2	46	55,860	0.3	42
District of Columbia	1,367	0.2	44	29,330	0.2	50
Florida	40,012	5.7	3	845,705	4.9	4
Georgia	21,075	3.0	12	402,369	2.3	16
Hawaii	3,997	0.6	37	70,931	0.4	40
Idaho	5,490	0.8	31	95,901	0.6	38
Illinois	27,948	4.0	7	617,981	3.6	8
Indiana	16,107	2.3	17	420,424	2.4	14
Iowa	5,062	0.7	32	135,883	0.8	35
Kansas	6,784	1.0	27	171,535	1.0	27
Kentucky	5,684	0.8	29	168,878	1.0	28
Louisiana	9,977	1.4	22	290,288	1.7	21
Maine	1,000	0.1	47	52,279	0.3	44
Maryland	28,284	4.0	6	386,906	2.2	17
Massachusetts	753	0.1	48	159,146	0.9	31
Michigan	15,020	2.1	18	864,674	5.0	3
Minnesota	25,709	3.7	9	372,630	2.2	19
Mississippi	5,650	0.8	30	161,948	0.9	30
Missouri	13,800	2.0	19	359,623	2.1	20
Montana	3,937	0.6	38	82,160	0.5	39
Nebraska	4,917	0.7	33	137,542	0.8	34
Nevada	8,960	1.3	23	163,220	0.9	29
New Hampshire	197	*	51	29,416	0.2	49
New Jersey	4,735	0.7	34	486,895	2.8	11
New Mexico	4,686	0.7	35	132,575	0.8	37
New York	17,666	2.5	16	786,439	4.6	5
North Carolina	17,685	2.5	15	267,795	1.6	23
North Dakota	3,115	0.4	40	39,553	0.2	47
Ohio	28,576	4.1	4	716,738	4.2	6
Oklahoma	11,883	1.7	20	378,398	2.2	18
Oregon	8,904	1.3	24	205,995	1.2	24
Pennsylvania	18,109	2.6	14	612,522	3.6	9
Rhode Island	202	*	50	42,526	0.2	46
South Carolina	6,721	1.0	28	203,296	1.2	25
South Dakota	2,450	0.4	43	56,139	0.3	41
Tennessee	19,173	2.7	13	408,274	2.4	15
Texas	63,848	9.1	2	1,428,671	8.3	2
Utah	11,313	1.6	21	202,290	1.2	26
Vermont	255	*	49	15,661	0.1	51
Virginia	28,301	4.0	5	460,936	2.7	12
Washington	23,333	3.3	11	635,744	3.7	7
West Virginia	1,330	0.2	45	52,062	0.3	45
Wisconsin	4,354	0.6	36	152,625	0.9	32
Wyoming	3,149	0.5	39	55,537	0.3	43
U.S. Total**	699,371	100.0		17,250,655	100.0	

* Less than 0.1 percent.

** Total includes Guam, Puerto Rico and the Virgin Islands.

Source: U.S. Department of Housing and Urban Development

FIGURE 7

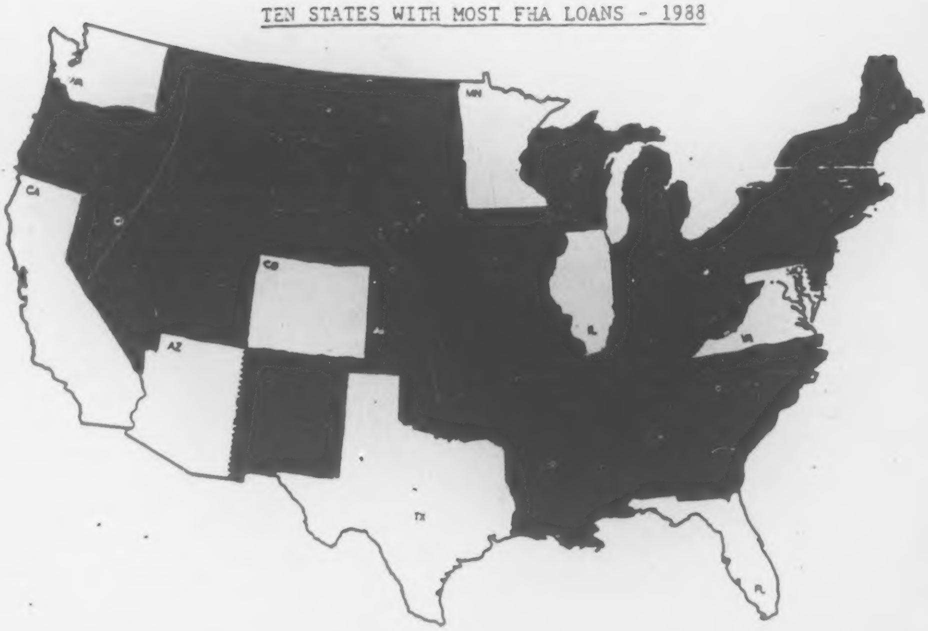
TABLE 8. State Ranking by Number and Dollar Volume of FHA-Insured Mortgages
1987, 1988, and Cumulative since 1934

	1987		1988		Cumulative	
	#	$	#	$	#	$
Alabama	25	51	25	51	22	51
Alaska	43	38	42	36	48	40
Arizona	6	6	10	9	10	5
Arkansas	26	28	26	26	33	32
California	1	1	1	1	1	1
Colorado	4	3	8	6	13	4
Connecticut	41	39	41	35	36	34
Delaware	47	47	46	44	42	44
District of Columbia	44	43	44	43	50	46
Florida	3	5	3	3	4	3
Georgia	14	13	12	12	16	15
Hawaii	30	22	37	25	40	27
Idaho	33	32	31	32	38	38
Illinois	8	9	7	8	8	6
Indiana	15	16	17	17	14	20
Iowa	36	37	32	37	35	36
Kansas	31	31	27	28	27	33
Kentucky	32	33	29	33	28	31
Louisiana	23	23	22	23	21	23
Maine	46	44	47	47	44	45
Maryland	9	7	6	4	17	9
Massachusetts	48	45	48	45	31	37
Michigan	21	25	18	20	3	13
Minnesota	7	8	9	7	19	11
Mississippi	28	29	30	30	30	29
Missouri	18	20	19	18	20	21
Montana	38	36	38	39	39	39
Nebraska	37	35	33	34	34	35
Nevada	22	18	23	21	29	22
New Hampshire	49	48	51	50	49	48
New Jersey	34	30	34	29	11	17
New Mexico	29	26	35	31	37	30
New York	13	14	16	15	5	7
North Carolina	16	15	15	14	23	18
North Dakota	39	40	40	41	47	42
Ohio	11	12	4	11	6	12
Oklahoma	20	21	20	22	18	19
Oregon	24	24	24	24	24	26
Pennsylvania	17	19	14	15	9	16
Rhode Island	50	49	50	49	46	49
South Carolina	27	27	28	27	25	25
South Dakota	42	42	43	42	41	43
Tennessee	12	11	13	13	15	14
Texas	2	2	2	2	2	2
Utah	19	17	21	19	26	24
Vermont	51	50	49	48	51	50
Virginia	5	4	5	5	12	8
Washington	10	10	11	10	7	10
West Virginia	45	46	45	45	45	47
Wisconsin	35	34	36	38	32	28
Wyoming	40	41	39	40	43	41
Rank correlation coeff.	0.95955		0.95073		0.91348	

Source: U.S. Department of Housing and Urban Development

FIGURE 8

TEN STATES WITH MOST FHA LOANS - 1988



	STATE	LOANS	DOLLAR AMOUNT	AVERAGE LOAN
1.	CALIFORNIA	80,766	$ 6,431,000,000	$ 79,625
2.	Texas	63,848	3,659,000,000	57,308
3.	Florida	40,012	2,363,000,000	59,057
4.	Maryland	28,284	2,135,000,000	75,484
5.	Virginia	28,301	1,945,000,000	68,725
6.	Colorado	27,750	1,781,000,000	64,180
7.	Minnesota	25,709	1,724,000,000	67,058
8.	Illinois	27,948	1,694,000,000	60,613
9.	Arizona	25,578	1,685,000,000	65,877
10.	Washington	23,333	1,483,000,000	63,558
	TOP TEN STATES	371,529	$ 24,900,000,000	$ 67,020
	BOTTOM TEN STATES	11,823	$ 675,000,000	$ 57,092

FIGURE 9

HOMEOWNERSHIP FACTS

MOST FAMILIES THAT CAN'T AFFORD TO BUY A HOME MAKE LESS THAN $40,000 A YEAR

Distribution of Household Income Among First-Time Homebuyers

	1985	1988	
Under $40,000	59%	42%	DOWN
$40,000 - $60,000	31%	38%	UP
$60,000 or more	10%	22%	UP

Household Income and Homeownership Rates

	Percent Who are Homeowners		
1986 Dollars	1974	1987	
Under $10,000	47%	42%	DOWN
$10,000 - $25,000	56%	55%	DOWN
$25,000 - $35,000	69%	68%	DOWN
$35,000 - $50,000	78%	79%	UP
$50,000 or more	86%	89%	UP

Source: The Harvard Joint Center for Housing Studies

Senator MIKULSKI. Well, thank you, Ms. Cincotta. Do you have those statistics?

Ms. CINCOTTA. Yes. I've included them and I put all of it in my testimony to be included. But it does—this is HUD's figures; it came from HUD. Usually we have a stamp on it and it's got the new one. It's just about as bad this year as the year before.

Senator MIKULSKI. Well, we want to move on. but let me say this. This subcommittee is very much concerned about the state of FHA. We are looking forward to the Price-Waterhouse study that will come out. We welcome your testimony from what we will call the curbstone analysis, which is often the real indicators of the health and vitality of a program.

And the other is, is that really to look at a major kind of cure for what is affecting FHA and——

Ms. CINCOTTA. Well, we spent 7 years getting it to only 18,000 claims a year. It just skyrocketed again and it is really filled with a lot of fraud. We end up just spending—wasting billions, billions of dollar; it's just like a mini-savings and loan scandal. Again, our neighborhoods are destroyed and we're working—what's sad is you have HUD. At one part of it we fight for more CDBG money; the other part of it puts out FHA mortgages. So, when FHA comes in and wrecks a community, we have to go fight for more CDBG money to come in and clean it up. It's the same building; it's the same people. I don't even know if they talk to each other.

Senator **Mikulski**. We don't know either, Gale; we don't know either.

Well, let's go on then to hear the view from the U.S. Conference of Mayors.

We welcome Mr. Eugene Lowe and we look forward to his testimony, again, from what we call the curbstone perspective.

STATEMENT OF EUGENE LOWE, U.S. CONFERENCE OF MAYORS

Mr. **Lowe**. Thank you, Madam Chair. I'm very happy to be here this morning to testify, representing the U.S. Conference of Mayors.

As you know—and I don't really have to tell you this—all the problems in the cities, especially housing, continue to get worse. I just want to talk about four or five housing programs today. We would like for all general housing/community development programs to be increased, at least at current services level this year in fiscal year 1991.

COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

Let me say just a few points about the Community Development Block Grant Program; Ms. Cincotta has already referred to it. We would certainly like for it to be funded at its full level, around $3.8 to $4 billion. But we know that that has been difficult for this committee—the Subcommittee—over the years and the last few years. And we would be actually very pleased if we got $3.2 billion as a minimum this year. That would be around current services and that would at least reverse the trend of the general decrease in CDBG funds over the last few years.

You know, cities have had a great deal of problems with funding of community development block grant activities. Your own city, Baltimore, received $32 million in 1981 and only received, in 1990, $21 million, a tremendous decrease in CDBG. We know there's a new housing program in the Cranston bill, S. 566; the Hart Program. I certainly would like to see that funded this year.

I think in the recently reported-out bill in the subcommittee, it's about $1.5 billion for that new program, which will be roughly, I would guess, around $30 million in outlays. And we would certainly like to see that funded, and about $3.1 billion in budget authority over the CBO baseline for all the programs in the Senate-reported bill.

Also, full funding for the McKinney Act Homeless Program. We disagree with the administration's cut of some programs. We'd like to see all of those programs, including shelter grants, transitional housing, FEMA and SAFAH, funded at the full funding level. Credit limit—full funding credit limit for section 108, at least at last year's level. And we'd like to see funding of the District heating programs at HUD. Those programs are very good; we have supported those programs over the last few—over several years, the U.S. Conference of Mayors——

Senator **Mikulski**. Excuse me, I didn't hear that. District heating?

Mr. **Lowe**. District heating and cooling. Those are some programs—it's a program at HUD that was funded—it used to be funded through the discretionary—the Secretary's discretionary fund. There's still around $1.5 million of that money earmarked for District heating which has not been used and we would like to see that money utilized at HUD.

I'll close here, Madam Chair—I see that the red light is on—and thank you for the opportunity to testify this morning.

Senator **MIKULSKI**. Well, Mr. Lowe, we thank you. If I had my way, the first thing I'd do is reinstitute revenue sharing. I think that was the biggest blow to communities. And now that I'm not only the Senator from Baltimore, where I work my reputation, but I've gotten out into the rural communities. And what was so great about revenue sharing is whether you were Boonesboro, MD—a small town in western Maryland on the way to Appalachia, but you don't want to be on the way to poverty—you had a tool. If you were a big city mayor, like Schaefer, now Schmoke, you had a tool. If you were an emerging growth area, like Salisbury with a rural population and now high tech moving in, you had a tool.

And if I could do one thing, it would be that. But the closest we have to that is community development block grant money. So, believe me, we are going to be firm advocates for that.

Mr. **LOWE**. Thank you.

Senator **MIKULSKI**. We have with us today Gordon Cavanaugh of the Council of Large Public Housing Authorities, a substantial user or our HUD budget. We look forward to your testimony and we thank you in putting together a grassroots coalition to advocate the needs of this subcommittee and its constituencies.

STATEMENT OF GORDON CAVANAUGH, COUNCIL OF LARGE PUBLIC HOUSING AUTHORITIES

PUBLIC HOUSING PROGRAM

Mr. **CAVANAUGH**. Senator Mikulski, thank you. We, all of us who have been involved in that effort, are grateful for your leadership and the concern you have for all the programs in the subcommittee and the difficult task that presents.

I want to thank you for allowing me to come speak for the public housing appropriations. This committee has indeed been the mainstay of the public housing program for 10 years, and most particularly and recently with the supplemental appropriation.

I'll get right to it. Andy Warhol said we had 15 minutes of fame, and I gather we can use 2.5 of them here. There's not much good news for public housing in the President's budget for 1991.

As you know, the administration requested $23.7 billion in budget authority for the HUD programs, which they said was up $18.4 from fiscal year 1990. When you exclude the renewals, there's, in fact, a $5.3 billion decrease. And when you look at the assisted housing accounts, congressional budget analyses show variously losses of $400 to $500 million under—and when Secretary Kemp, in testifying before your kindred committee in the House side, has conceded at least a $200 million reduction in HUD-assisted housing accounts.

Public housing is especially hard hit. We've summarized in the testimony our specific figures. But what I'd like to point up here is that, while pre the supplemental, this was the worst funding year for public housing operating subsidies in the history of the program, or at least my involvement with it, and if this year was bad, next year will be a disaster. I mean if this is a disaster, next year will exceed it.

The operating subsidy in the HUD budget is, by our calculation and the calculation of the other two national groups, $253 million short. And a shortfall of that magnitude just would render impossible any effort to carry out reasonable management and maintenance.

HUD's requests for the operating subsidy have unfailingly underestimated the real needs in each of the last 10 years at least. This is really the gang that can't count straight. And I've shown, attached to our testimony, a breakdown of how this would impact a variety of communities. And, indeed, as I'm sure you're hearing a lot of Baltimore statistics today, but were the HUD operating subsidy requests taken, rather than that of CLPHA, Baltimore, by our calculation, would lose $4.7 million in fiscal 1991; the ranking minority city in New York would lose $37.2 million in 1991; and it goes on down to even the Salt Lake Cities of the world losing what is 10 percent or more of their operating subsidies, with devastating impacts.

MODERNIZATION PROGRAM

Moving over to the modernization program, we are pleased that the Administration's request has, for the first time, has come--getting close to the amounts that the committee has actually been appropriating. That's an encouraging sign. But we really think the Department ought to be moving to the levels that were recommended by the ICF studies that were generated really out of this subcommittee in 1985 and finally culminated, which recommend that if we're to clean up public housing by 2000, we need an appropriation of at least $2.5 billion. And, if we're not to, in fact, lose between now and then, we need an appropriation of $3.7 billion. We realize the latter figure is a goal for us. But the bottom figure, we would hope, would be the chairman's mark.

HUD regularly comes up here this time of year and talks about pipeline backlogs in the modernization program. The annual event has taken place again this year. They give you a lump figure, without in any way timing when that money became available to public housing. Needless to say, HUD—when you appropriate money, HUD never gets it out until the very end of the fiscal year for which you have appropriated it, so almost every year that I've been involved with this, there's been a 12-month lag on when the housing authority in fact gets it.

From then on, all our analyses show that we spend it in a very smart fashion. And no matter what level of funding we get, it gets dealt out regularly. We've presented a number of recommendations to HUD that we think would accelerate the program; we're almost hoarse, repeating these over many years, of how they could cut at least one-third of the time off the expenditure rates. But we're still trying.

The program, by the way, as I'm sure you've seen in Baltimore, has brought great improvements to the lives of the residents. It has vastly improved the American public housing stock in those projects that are so doable.

LEAD PAINT

Lead paint—I know of your personal concern on this issue and the concern that the subcommittee has shown. We're very grateful for the efforts of Kevin Kelly, and particularly of Stephen Kohashi over a longer period of time, to try to bring some common sense out of our approaches here. We're distressed and surprised that HUD has not mentioned a word of lead paint abatement in its budget docket for fiscal 1991.

Certainly the health—the good health of the children in our apartments is every bit as important as all the other tenant initiatives we hear the Secretary undertaking, and we do hope he will be more forthcoming in getting the adequate funding for the job.

Our last effort is—I'm sorry; I see the red light.

Just to say that the need for additional public housing is well documented. Our waiting lists are scratching a million now. And I have separate comments that I'll make about the unfortunate action in the Senate authorizing committee the other day. I would just say that what they did not coincide with what had been recommended by the National Housing Task Force, which said that public housing development should continue; it's very necessary. And what's happened upstairs, I think, is kind of a reverse Robin Hood. Taking money from very poor programs, shifting them into grants that will be distributed to a very different income group.

Thank you very much.

Senator MIKULSKI. Well, thank you, Mr. Cavanaugh. I know you raced through your testimony. I'm going to come back to your testimony, because it ties in to some of the things both Mr. Lowe and Ms. Cincotta had, particularly in how it affects families.

[The statement follows:]

STATEMENT OF GORDON CAVANAUGH

Good morning, Madam Chairman, members of the Committee, staff and invited guests.

I am here to testify on behalf of the Council of Large Public Housing Authorities (CLPHA). Thank you for inviting me to speak to you concerning the needs for public housing appropriations. This Committee has truly been a mainstay of the public housing program during the past decade, and most recently in support of the FY90 $72 million supplemental for public housing operating subsidies. We and our residents owe you a great debt of appreciation and thanks.

There's not much good news for public housing in the President's proposed budget for FY91.

Total Budget. The Administration requested $23.7 billion in budget authority for HUD programs in FY91, up from $18.4 billion in FY90. Excluding the new Budget Authority required for Section 8 contract renewals, the apparent $5.3 billion increase in HUD budget authority would actually be a decline of over $1 billion. Worse, in the subsidized housing accounts, a Congressional budget analysis shows that there would be nearly a $500 million decline between what the President has proposed and current services.

Incremental units. The 82,000 'incremental' units requested by the Administration for FY91 are substantially less than the 109,000 units requested last year. Programs under the Administration's proposed new HOPE initiative would divert resources from existing programs, while adding nothing to the housing stock, and there's no new money proposed for public housing development -- even though we have waiting lists of over 800,000 households.

Public housing operations and modernization. Public housing operating subsidies -- our life blood -- would once again be devastatingly underfunded. There is a $252.9 million shortfall between the $1825.7 million proposed by the Administration and $2078.6 million, which is CLPHA's best estimate of FY91 needs at this time. **A shortfall of this magnitude would render impossible the PHA's efforts to carry out reasonable management and maintenance programs.**

HUD's budget requests over the past decade have consistently underestimated real public housing operating subsidy needs.

As just one disastrous result, we are currently facing a shortfall of $122 million in FY90 and, even with the blessed $72 million supplemental, we will still face a $50 million shortfall in FY90, which will have a severe adverse impact upon our residents.

Also, with a request less than FY90 appropriations, HUD is taking little initiative to ask for the level of public housing modernization funding required, as shown by well-documented recent studies, or to provide the PHAs with the funding needed for the testing and abatement of hazardous materials such as lead paint.

Summary of FY91 Funding Levels Recommended by CLPHA.

Operating Subsidies

Funding needed for FY91 year:

'Best estimate' of FY91 need:	$2078.6 million
5% contingency:	103.9 million
Total needed for FY91:	$2182.5 million

Make-up funding needed in FY91 appropriation:

FY90: an additional $50.0 million is still needed, even assuming passage of a $72 million supplemental.

FY88: $9.0 million is still needed to make PFS whole at 100% of eligibility for FY88.

CIAP (Modernization): $2,500.0 million, plus an add-on of $500 million for lead testing and abatement.

Development/MROP: $950 million.

DEVELOPMENT, MROP AND REPLACEMENT

The Housing bill (S. 566) recently reported out by the Senate Banking Committee simply stuns us.

We are shocked and disturbed by the action in the Committee that would end the public housing development program, a program that for 50 years has served the needs of the poorest people in the country - and which up until now has survived the attacks of even the most conservative elements.

Public housing development units are vital. The program provides incremental units for poor families, for the elderly and for the disabled. The waiting lists are long and getting longer. Units are also needed for replacement housing where PHAs are reducing units as part of rebuilding their distressed projects. Yet the Banking Committee's action would end the program and give its funds to a "HOP" blockgrant -- which would have a much broader distribution and which would not serve families as poor.

CLPHA calls this the "Reverse Robin Hood Effect": taking from the poor and giving to the better off. We don't believe that this shameful compromise should or will ever become law.

Tenant-based subsidies (such as Section 8 certificates and vouchers) are not helpful if there are few or no vacancies in reasonably-priced housing in an area, especially for larger housing units. Vouchers and certificates have low success rates in certain cities, particularly for large very-low-income families that have to move in order to meet program requirements. The Section 8 program of 'existing' certificates, while very useful, simply cannot do the entire job alone.

Recent information from HUD shows a large demand from PHAs for units to be used for Major Reconstruction of Obsolete Projects (MROP) - an initiative of the Appropriations Committees - and for replacement units. Many important redevelopment projects will not be able to go ahead unless such replacement units are provided.

CLPHA therefore recommends that, at a very minimum, the Committee provide **$945 million for public housing development**, MROP and replacement in FY91, which should provide 7,500 units of incremental development ($525 million), plus 3,000 replacement units ($210 million) and 3,500 units of MROP ($210 million).

Even that number is far from enough. But we think it would be a modest step in the right direction to rebuild the much-needed public housing program.

PUBLIC HOUSING MODERNIZATION

HUD proposes $1.847 billion for public housing modernization, of which $5 million would be used for technical assistance and training for resident management organizations. HUD also says it will propose legislation for a limited matching-fund program in which $150 million of the $1.85 billion would be allocated to PHAs selected by states that are willing to provide a dollar-for-dollar match.

The Administration's request for almost $2 billion in public housing modernization funds is a refreshing change from prior years. CLPHA is pleased to see that HUD has raised its request for modernization money closer to actual appropriations in recent years.

But the Administration's request only begins to move in the direction of the recommendations of the public housing modernization needs assessment (Abt/ICF) study, which calls for $2.5 billion annually to eliminate the existing backlog of modernization needs in the public housing stock by the year 2000; and it is far less than the $3.7 billion per year that these same studies say would be required over the same period not only to eliminate the backlog, but keep up with new needs as they occur due to the normal aging of the public housing stock.

CLPHA recommends **$2.5 billion for public housing modernization** in FY91.

The modernization pipeline. Madam Chairman, each year HUD announces the amount of currently unspent modernization money, without offering any clues to the understanding of that amount, and then says this is proof that no additional funds could be utilized by PHAs until the present backlog has been eliminated.

CLPHA has answered each time that this is a completely misleading characterization of the modernization process by HUD. We continue to make that charge.

In recent testimony to Congress, HUD alleged that there is $3.4 billion in currently unspent modernization funds. HUD fails to give the backlog by year of appropriation and date of distribution, therefore overemphasizing recently appropriated monies. It is also difficult to understand the basis of this calculation, since HUD's own reports indicated that as of 9/30/89, there was approximately $3 billion in unspent CIAP funds, exclusive of FY89 funds; and it cannot be expected that much of the FY89 funds would yet have been spent by the PHAs. PHAs don't get the money until the very end of the fiscal year for which it is appropriated, generally the last two weeks of September: a needless HUD-caused delay.

A detailed analysis of the past record of the expenditure of modernization (CIAP) funds by the PHAs, prepared by CLPHA staff using HUD's own data, shows that year after year, PHAs have a creditable record of expending their modernization funds within a reasonable length of time; and that when Congress has increased the level of appropriations, the PHAs' annual expenditures have gone up too.

CLPHA has made many recommendations to HUD concerning how the mod process could be speeded up, but we never seem to get very far.

But the historical track record shows that increasing the appropriations levels will not slow down the expenditure rate; it will mean that more PHAs will be able to get needed funding every year.

LEAD PAINT

CLPHA is disappointed by the absence of any reference in HUD's budget request to lead-based paint abatement. We would have hoped there would be more expressed definition of the problem by HUD. We recommend that $500 million for LBP testing and abatement be added to the 2.5 billion for modernization.

We recognize that this committee took a very strong role in many ways on this issue of lead abatement and created some order out of disorder. Yet public housing is still faced with the potentially huge costs of this testing and abatement effort. We do want the residents and children of public housing to live in healthful environments, but it will be costly.

That is why we are asking for the $2.5 billion to build the CIAP program up closer to the level of the abt study -- which doesn't include lead -- plus an additional $500 million for lead, to be folded into CIAP. Lead produces added costs, sometimes directly (in terms of the cost of the abatement work that needs to be done), but also for insurance, testing, interim maintenance and issues related to the workers, designers, etc.

Also, lead paint testing and abatement costs must be recognized as being allowable, where needed, over and above the normal cost limits (TDCs) for public housing modernization.

HUD REPORT ON ALLOCATIONS

Finally, concerning modernization, we want to note that HUD, within recent weeks, has issued its "Report to Congress on Alternative Methods for Distributing Future Modernization Funds."

The report is a year overdue and plainly too late for proper consideration in the current housing authorizing bills. We trust that HUD will, as the Housing and Community Development Act of 1987 expected, enter into consultations with the Housing Authorities. CLPHA expects that suitable negotiations will lead to a generally acceptable and more efficient distribution system.

Although we have not yet had time to fully digest the final version of this long-delayed report, it appears that it is, in most cases, a thorough and professional modernization needs study, conducted fairly and without bias.

We do expect to make a more detailed response to the HUD report soon. The idea of taking mod money away from troubled PHAs and redistributing it only to a sub-set of PHAs which HUD chooses to call "good performers" is disturbing. That concept goes well beyond the mandate of the mod study. We have some concerns with the weights of the different variables HUD used in the statistical distribution formula. And we think that whatever new distribution system is put in place, it will need to provide a way of getting an adequate amount of funding to certain high-needs projects whose modernization requirements will never be adequately predicted by a statistical formula.

While we do not expect to agree with all of HUD's recommendations, we are very pleased at this favorable outcome of a process that was begun in the appropriations committees in FY83 when, at the urging of PHA groups, funding for the modernization needs study was first provided. We thank both the committee and HUD for these very significant accomplishments.

OPERATING SUBSIDIES

Madam Chairman and members of the Committee, I can say without any reservations whatsoever that FY90 is the worst year in history for the funding of the operations of the public housing program -- BUT THIS DISASTER WILL BE EXCEEDED IN FY91 IF HUD'S BUDGET RECOMMENDATIONS ARE FOLLOWED!

At this moment, we are facing a $122 million shortfall in operating subsidies for FY90. HUD is distributing to the PHAs only 93.4% of the amount of operating subsidy to which the PHAs are entitled according to HUD's own regulations. Worse still, HUD has refused to ask Congress for any of the amounts needed to make up this horrendous shortfall.

We are grateful, Ms. Mikulski, for what you have done to help us with the FY90 shortfall, but we ask that somehow the remaining $50 million shortfall be made up. We have previously, with enormous reluctance, suggested a transfer from the drug monies. If not that, then a make-up, as has occurred in the past, in the next year's appropriations.

FY91 Operating Subsidies.

For operating subsidies, the President's budget asks for $1825.7 million for FY91.

CLPHA's estimate of "ordinary PFS requirements" for FY91 is $197.9 million higher, or $2023.6 million. In addition, CLPHA recommends $55 million for additional insurance adjustments, and a contingency of 5%, or $103.9 million, bringing total FY91 needs up to $2182.5 million.

The House Appropriations Subcommittee at its hearings asked HUD to explain why its figures were so grossly below those of CLPHA, particularly given HUD's long, 10-year history of understating operating subsidy needs. We would like to suggest that the Chief Clerks of both Appropriations Committees sit down with HUD and ourselves and review this question together, so that your committee isn't put in the position of having to face yet another supplemental in FY91, and so that we don't have to come hat in hand to you one more time.

I have shown in an Attachment to this testimony the magnitude of the shortfall - for FY90 and FY91 - for a variety of Housing Authorities that have been contacted by CLPHA. Baltimore, for example, would have lost $2,717,770 in FY90, and faces a loss of $4,740,433 in FY91. For the New York City Housing Authority, the comparable losses would be $21,378,410 in FY90 and $37,289,001 in FY91.

California may still be looking for "The Big One" in earthquakes, but for us The Big One is here now - FY91! Without your continued help it is going to totally devastate us; PHAs will have to shut down a variety of their essential activities. There aren't any authorities that can "manage their way around" cuts of this magnitude.

(These predicaments are also why we couldn't be more serious about our proposal for a 5% contingency to be added to the FY91 appropriation for operating subsidies. All recent history bears out the urgent need for such a contingency fund. HUD has been short in its budget recommendations for every year for at least the last 10 years).

(Also, the next time the Senate Banking Committee is in the mood for "simplification", we think that a step toward genuine simplification would be to consolidate the certificate and voucher programs; and indeed to pay the PHAs the same amount, based upon an FMR based subsidy. An extensive HUD study of such a possible FMR-based operating subsidy was carried out in the early 1980's. When that study was released, however, HUD recommended that a new system of this type, if adopted, should only be partially funded. For that reason, it was opposed by CLPHA. An adequately funded system would be well worth taking a close look at, and could well end the constant struggle against HUD's failure to request adequate operating subsidies).

Drugs and Crime.

HUD proposes a separate appropriation of $150 million in FY91 for drug elimination grants to PHAs and IHAs.

The funds could be used for a variety of activities, including employing additional security personnel, reimbursing law enforcement agencies for the cost of providing extra security, making physical improvements to increase security, supporting tenant patrols, developing innovative programs to reduce drug use, and providing resident groups with funds to develop security and drug abuse prevention programs.

Madam Chairman, CLPHA strongly supports additional funding for the PHAs to carry out these very important activities. The last thing we want to do is give up drug money, but we shouldn't have to get it at the expense of basics. We don't want millions of dollars in "drug subsidies" but inadequate operating subsidies.

We therefore recommend that this amount be added to the Allowable Expense Levels (AELs) of PHAs, without additional regulations. All of the drug related activities listed by HUD should be normally allowed and eligible activities for funding under ordinary PHA operating budgets.

The same considerations apply to the drug money in FY90. We would very much appreciate having extra drug monies for FY90, but not at the expense of normal operating subsidies.

Giving a few extra dollars to the PHAs for drug programs may well be very much like buying a new set of clothes for a corpse! The first priority has got to be to keep the body alive!

CONCLUSION

Madam Chairman, we recognize that our requests involve monies that are hard to come by, but the country does manage to come by money for other things and we're not persuaded any more that there isn't money to do the job of public housing right.

In fact, we're watching a lot of things for which sizeable monies are being found, e.g. S&L bail-out, housing overseas, census takers, etc.

The public housing program is asked to confront some of the most difficult issues faced by society. Public housing is willing to undertake the efforts needed to respond to these issues, if the necessary funding is provided.

Without those extra funds, the institution of public housing will be unable to properly address the problems of drugs, lead paint, homelessness, housing for the deinstitutionalized mentally ill, and low income families that need other special societal helps such as day care and job training.

We appreciate Secretary Kemp's words about the problems of the poor, even though we regret that he has been unwilling to seek the necessary funds to remedy them; but, sadly, he is not so unique in this regard.

That's why we so appreciate you, Senator Mikulski, as a friend of the powerless, and as a constant and effective ally of the poor. We hope that you can lead the Committee to support the requests that we have made in our testimony to give better shelter to those in need.

ESTIMATED FY90 AND FY91 OPERATING SUBSIDY SHORTFALL

Council of Large Public Housing Authorities (CLPHA)

PHA Operating Subsidy Shortfalls: (a) FY90 at 93.4% of PFS; (b) FY91 prelim. est. at 89.68% of PFS.

Version 91-3 (SHORT FORM)

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		For FY90, Local FY Starting	100% PFS FY90	93.4% PFS FY90	SHORTFALL FY90	100% PFS FY91	89.68 % of PFS in FY91	SHORTFALL FY91
Alaska State	AK		$5,136,446	$4,797,441	$339,005	$5,729,706	$5,138,400	$591,306
Mobile	AL	1/1/90	$5,367,475	$5,013,222	$354,253	$5,987,418	$5,369,517	$617,902
Los Angeles (City)	CA		$9,758,037	$9,114,007	$644,030	$10,885,090	$9,761,769	$1,123,341
Los Angeles (County)	CA	7/1/90	$2,846,854	$2,658,962	$187,892	$3,175,666	$2,847,937	$327,729
Sacramento City	CA	1/1/90	$1,700,800	$1,588,547	$112,253	$1,897,242	$1,701,447	$195,795
Sacramento County	CA	1/1/90	$691,430	$645,796	$45,634	$771,290	$691,693	$79,597
San Francisco	CA	10/1/90	$14,207,941	$13,270,217	$937,724	$15,848,958	$14,213,346	$1,635,612
Bridgeport	CT	10/1/90	$7,008,164	$6,545,625	$462,539	$7,817,607	$7,010,830	$806,777
New Haven	CT	10/1/90	$9,040,660	$8,443,976	$596,684	$10,084,856	$9,044,099	$1,040,757
Wilmington	DE	6/1/90	$4,668,562	$4,360,437	$308,125	$5,207,781	$4,670,338	$537,443
Dade County (Miami)	FL	10/1/90	$17,404,813	$16,256,095	$1,148,718	$19,415,068	$17,411,433	$2,003,635
Jacksonville	FL	4/1/90	$5,236,561	$4,890,948	$345,613	$5,841,384	$5,238,553	$602,831
Orlando	FL	6/1/90	$1,627,574	$1,520,154	$107,420	$1,815,559	$1,628,193	$187,366
St. Petersburg	FL	6/1/90	$1,426,579	$1,332,425	$94,154	$1,591,349	$1,427,122	$164,227
Atlanta	GA	7/1/90	$32,277,212	$30,146,916	$2,130,296	$36,005,230	$32,289,490	$3,715,740
Chicago	IL	1/1/90	$121,422,080	$113,408,223	$8,013,857	$135,446,330	$121,468,269	$13,978,061
South Bend	IN	10/1/90	$1,352,272	$1,263,022	$89,250	$1,508,459	$1,352,786	$155,673
Louisville	KY	1/1/90	$11,912,584	$11,126,353	$786,231	$13,288,487	$11,917,116	$1,371,372
New Orleans	LA	10/1/90	$26,612,522	$24,856,096	$1,756,426	$29,686,268	$26,622,645	$3,063,623
Boston	MA	4/1/90	$24,661,432	$23,033,777	$1,627,655	$27,509,827	$24,670,813	$2,839,014
Cambridge	MA	4/1/90	$2,637,036	$2,462,992	$174,044	$2,941,614	$2,638,039	$303,575
Lawrence	MA	4/1/90	$1,645,079	$1,536,504	$108,575	$1,835,086	$1,645,705	$189,381
Lowell	MA	10/1/90	$2,391,884	$2,234,020	$157,864	$2,668,147	$2,392,794	$275,353
New Bedford	MA	1/1/90	$1,430,352	$1,335,949	$94,403	$1,595,558	$1,430,896	$164,662
Baltimore	MD	7/1/90	$41,178,329	$38,460,559	$2,717,770	$45,934,426	$41,193,993	$4,740,433
Montgomery County	MD	7/1/90	$1,241,754	$1,159,798	$81,956	$1,385,177	$1,242,226	$142,950
Portland	ME	7/1/90	$1,230,734	$1,149,506	$81,228	$1,372,884	$1,231,202	$141,682

ESTIMATED FY90 AND FY91 OPERATING SUBSIDY SHORTFALL

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Detroit	MI	7/1/90	$24,904,060	$23,260,392	$1,643,668	$27,780,479	$24,913,534	$2,866,945
Saginaw	MI		$839,721	$784,299	$55,422	$936,709	$840,040	$96,668
Minneapolis	MN	10/1/90	$9,135,147	$8,532,227	$602,920	$10,190,256	$9,138,622	$1,051,634
St. Paul	MN	4/1/90	$4,954,940	$4,627,914	$327,026	$5,527,236	$4,956,825	$570,411
St. Louis	MO	10/1/90	$11,974,264	$11,183,963	$790,301	$13,357,292	$11,978,819	$1,378,472
Omaha	NB	1/1/90	$4,260,550	$3,979,354	$281,196	$4,752,644	$4,262,171	$490,473
Greensboro	NC	10/1/90	$3,019,360	$2,820,082	$199,278	$3,368,096	$3,020,509	$347,588
Manchester	NH	10/1/90	$897,603	$838,361	$59,242	$1,001,276	$897,944	$103,332
Atlantic City	NJ	4/1/90	$3,532,829	$3,299,662	$233,167	$3,940,871	$3,534,173	$406,698
Jersey City	NJ	4/1/90	$10,038,044	$9,375,533	$662,511	$11,197,438	$10,041,862	$1,155,576
Newark	NJ	4/1/90	$37,222,110	$34,765,451	$2,456,659	$41,521,264	$37,236,269	$4,284,996
Las Vegas	NV		$6,213,354	$5,803,273	$410,081	$6,930,996	$6,215,718	$715,279
Albany	NY	7/1/90	$3,163,476	$2,954,687	$208,789	$3,528,857	$3,164,679	$364,178
New York City	NY	1/1/90	$323,915,310	$302,536,900	$21,378,410	$361,327,528	$324,038,527	$37,289,001
Rochester	NY	10/1/90	$3,323,406	$3,104,062	$219,345	$3,707,260	$3,324,671	$382,589
Akron	OH	7/1/90	$7,622,897	$7,119,786	$503,111	$8,503,342	$7,625,797	$877,545
Allen Metro. (Lima)	OH	7/1/90	$224,690	$209,860	$14,830	$250,642	$224,775	$25,866
Cincinnati	OH	7/1/90	$12,912,739	$12,060,498	$852,241	$14,404,160	$12,917,651	$1,486,509
Cleveland	OH	1/1/90	$31,520,440	$29,440,091	$2,080,349	$35,161,051	$31,532,430	$3,628,620
Columbus	OH		$7,453,443	$6,961,516	$491,927	$8,314,316	$7,456,278	$858,037
Loraine Metro.	OH	7/1/90	$1,708,690	$1,595,916	$112,774	$1,906,044	$1,709,340	$196,704
Toledo	OH	7/1/90	$5,373,799	$5,019,128	$354,671	$5,994,473	$5,375,843	$618,630
Youngstown	OH	7/1/89	$3,322,181	$3,102,917	$219,264	$3,705,893	$3,323,445	$382,448
Zanesville	OH	7/1/90	$453,702	$423,758	$29,944	$506,105	$453,875	$52,230
Oklahoma City	OK	1/1/90	$4,376,860	$4,087,987	$288,873	$4,882,387	$4,378,525	$503,862
Portland	OR	4/1/90	$3,820,576	$3,568,418	$252,158	$4,261,853	$3,822,029	$439,823

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Erie	PA	4/1/90	$1,723,250	$1,609,516	$113,735	$1,922,285	$1,723,906	$198,380
Harrisburg	PA	1/1/90	$3,277,467	$3,061,154	$216,313	$3,656,014	$3,278,714	$377,301
Philadelphia	PA		$79,198,719	$73,971,604	$5,227,115	$88,346,171	$79,228,846	$9,117,325
Pittsburgh	PA	1/1/90	$17,190,421	$16,055,853	$1,134,568	$19,175,915	$17,196,960	$1,978,954
Providence	RI	7/1/90	$3,817,498	$3,565,543	$251,955	$4,258,419	$3,818,950	$439,469
Dallas	TX	1/1/90	$11,006,865	$10,280,412	$726,453	$12,278,158	$11,011,052	$1,267,106
Houston	TX	1/1/90	$7,072,455	$6,605,673	$466,782	$7,889,324	$7,075,145	$814,178
San Antonio	TX		$13,222,537	$12,349,850	$872,687	$14,749,740	$13,227,567	$1,522,173
Salt Lake City	UT	7/1/90	$888,791	$830,131	$58,660	$991,446	$889,129	$102,317
Alexandria	VA	1/1/90	$610,742	$570,433	$40,309	$681,283	$610,974	$70,308
Norfolk	VA	7/1/90	$7,719,960	$7,210,443	$509,517	$8,611,615	$7,722,897	$888,719
Portsmouth	VA	7/1/90	$3,852,440	$3,598,179	$254,261	$4,297,397	$3,853,905	$443,491
Burlington	VT	7/1/90	$616,400	$575,718	$40,682	$687,594	$616,634	$70,960
Seattle	WA	10/1/90	$5,871,739	$5,484,204	$387,535	$6,549,924	$5,873,972	$675,952
Milwaukee	WI	10/1/90	$5,454,226	$5,094,247	$359,979	$6,084,189	$5,456,301	$627,888
Charleston	WV		$2,452,299	$2,290,447	$161,852	$2,735,540	$2,453,232	$282,308
Wheeling	WV	10/1/90	$1,019,490	$952,204	$67,286	$1,137,261	$1,019,878	$117,363

NOTES:

(1) Figures for 100% of PFS for FY90 come from the PHAs themselves, based upon their own budget estimates, with the following exception: for PHAs with fiscal years beginning 10/1, the figure shown above (100% PFS) is estimated by multiplying their current year's PFS eligibility (10/1/89-9/30/90, paid out of federal fy89 funds) times 1.05.

(2) Figures for FY91 are simplified, preliminary estimates only. CLPHA's estimate of FY91 operating subsidy needs, exclusive of 5% contingency, is $2078.6 million. If Congress appropriates $1864 million, this would result in a $214.6 million shortfall, and PFS would be funded at 89.68% of eligibility in FY91. CLPHA's calculation of $2078.6 million (FY91) represents an 11.55% increase in operating subsidy over the estimated $1863.4 million needed in FY90. The calculations for FY91 shown in the above table are based upon the simplifying assumption that all PHAs would experience an +11.55% increase in their operating subsidy eligibility over 100% of their FY90 PFS level.

ENVIRONMENTAL PROTECTION AGENCY

STATEMENT OF DAVID DICKSON, CONSERVATION ASSOCIATE, IZAAK WALTON LEAGUE OF AMERICA

WATER QUALITY PROGRAMS

Senator **MIKULSKI**. Now, though, we'd like to turn to the environmental component of this testimony. Mr. Dave Dickson was the first to be here.

Mr. Dickson, we look forward to the testimony of the Izaak Walton League.

Mr. **DICKSON**. Thank you, Madam Chair.

I'm testifying on behalf of the members of the Izaak Walton League who employ me on their national staff. We appreciate this opportunity to present our views and urge the subcommittee to provide increased funding for the U.S. Environmental Protection Agency in fiscal year 1991. We are concerned about EPA's operating budget and funding for water quality programs, in particular.

One of our highest priorities is increased funding for nonpoint source pollution control cost share grants to the States under section 319 of the Clean Water Act. Nonpoint source pollution, contaminated runoff, and ground water discharge is the single largest threat to our Nation's waters. EPA and the States estimate that this most pervasive of water quality problems is the leading cause of nonattainment of water quality standards.

Last year this committee led the way in providing first-time funding of over $37 million for this program out of the "Abatement control and compliance" account for the current fiscal year. With these initial cost-share grants, the States are beginning to implement their EPA-approved nonpoint source management programs.

In order for the States to build on the progress that is being made in the current year, they will need to receive a substantial increase in cost-share grants for the next fiscal year. Rather than provide for the needed increase, the administration has proposed a 60-percent cut in the program. We believe that the States will be able to utilize an appropriation of between $70 and $90 million next year and we urge that the subcommittee provide that amount at a minimum.

In making these recommendations, and those contained in our written statement, we are mindful of the constraints faced by the subcommittee and realize that much depends on 302(b) allocations that the committee will receive. Therefore, we are working with other parties interested in the programs funded by the subcommittee to achieve the largest possible allocation.

However, regardless of the size of the allocation, we urge the committee, in this the 20th anniversary of Earth Day, to place a very high priority on funding for EPA when it allocates its available funds among all of the important domestic program it supports. We thank you for your continued support for clean water and this opportunity to present our views.

Senator **MIKULSKI**. I almost started to call you Mr. Walton. [Laughter.]

Mr. Dickson, this was an excellent critique of the water component of the EPA budget and it is an extremely helpful analysis on where you think the resources should be for the greatest degree of effectiveness.

I'd like to thank you for this testimony.

Mr. DICKSON. Thank you.

[The statement follows:]

STATEMENT OF DAVID DICKSON

Madam Chair, Members of the Committee my name is David Dickson and I am testifying on behalf of the members of the Izaak Walton League of America. We appreciate this opportunity to present our views and urge the committee to provide increased funding for the U.S. Environmental Protection Agency (EPA) in Fiscal Year 1991 (FY91). Our primary concern is the agency's operating budget and funding for water quality programs authorized by the Clean Water Act.

The Izaak Walton League of America is a national nonprofit membership based organization dedicated to the protection and restoration of America's natural resource heritage for the benefit of both present and future generations. The League has over 50,000 members in 400 chapters nationwide. For more than sixty-eight years the protection and restoration of the nation's water quality have been top priorities for the League and remain so today.

EPA's Operating Budget

Just a couple of weeks ago the nation, and indeed the world, celebrated the twentieth anniversary of Earth Day. The underlying theme of all the activities involved in that celebration was a renewal of our collective commitment to the protection of the environment. We urge this committee to help renew the federal government's commitment to environmental protection by restoring EPA's operating budget to a level that allows it to carry out the responsibilities Congress has given it. In the early 1980's, EPA's operating programs--those responsible for research, monitoring, standards-setting, permitting, oversight and enforcement--suffered tremendous budget cuts and the resulting loss of personnel. While much to thee credit of this committee, gains have been made in recent years, the Agency's operating budget is now about the same as it was in 1979, before Congress doubled the agency's workload with the enactment of several important environmental statutes.

To his credit President Bush has requested a 12 percent increase in the agency's operating budget in the next fiscal year. However, this proposed increase does not account for inflation and is far short of what is needed. In a letter to the members of Congress in January of this year, the environmental community urged that the operating budget be increased by a full 25 percent in FY91--as the first step in the phased restoration of the agency's budget. This recommendation tracks closely with that the community included in Blueprint for the Environment, a comprehensive package of environmental policy proposals it put forth to the then new administration in November of 1988. We believe EPA's overall operating budget for FY91 should be roughly $2.9 billion. This figure reflects the 25 percent increase over the current year appropriation, includes $400 million to implement the pending Clean Air Act amendments and proposed increases in nonpoint source pollution control grants under Section 319 of the Clean Water Act.

In making this recommendation and those listed below, we are mindful of the constraints faced by the subcommittee. We realize that much depends upon the size of the 302(b) allocation the committee will receive. We are working with other parties interested in the programs funded by this subcommittee to achieve the largest possible allocation. However, regardless of the size of the allocation, we urge the committee, in this the twentieth anniversary year of Earth Day, to place a very high priority on funding for EPA when it allocates its available funds among all the important programs it supports.

Water Quality Programs

While the president's proposed cuts in funding for many water quality programs including nonpoint source pollution, clean lakes and construction grants are very troubling, we welcome proposed increases in other programs. For example, we support the president's proposed increases for water quality enforcement, wetlands protection and coastal environment protection. We urge the committee to provide for those increases.

What follows are recommendations to fill the resource needs for specific programs.

Nonpoint Source Pollution Control Grants--$130 Million

Increased funding for nonpoint source pollution control under Section 319 of the Clean Water Act is our highest priority. Nonpoint source pollution, contaminated runoff and groundwater discharge, is the single largest threat to our nation's waters. EPA and the states estimate that this most pervasive of water quality problems is the leading cause of the nonattainment of water quality standards in the nation.

Last year this committee led the way in providing first time funding (over $37 million after sequestration) for this program in the current fiscal year. With these initial cost-share grants the states are beginning the implementation of their EPA approved nonpoint source management programs under Section 319. In order for the states to build on the progress being made in the current fiscal year, and fully establish these programs within their overall water quality management schemes, they will need to receive a substantial increase in grants under Section 319. In addition, increased funds are necessary to offset the loss of set-asides previously available through the Construction Grants Program.

Rather than provide for the needed increase, the administration, by requesting only $14.3 million, has proposed a cut of more than sixty percent for next year. Such a proposed cut makes it extremely difficult for the states to plan for merely sustaining their current level of effort let alone to provide needed growth.

In requesting that the committee provides the fully authorized level of $130 million, we are aware that the states may not be able to utilize that level of funding in terms matching cost shares. We believe that the states would be able to use an appropriation of between $70 and $90 million next year. However, the authorization for this program will expire after FY91 and that there may be no authority to continue appropriations in FY92. Legislation has been introduced to reauthorize the program, but it is possible that Congress may not complete action before the authorization expires. Therefore, as Section 319(j) states that funds appropriated but not expended shall remain available, we view any funds not utilized by the states in FY91 as a contingency if the program is not reauthorized before FY92.

State Revolving Funds--$2.4 Billion

In light of the tremendous remaining need for the construction of sewage treatment facilities, and the authorized phase out of federal assistance to meet that need, we recommend full funding for the State Revolving Fund Program. The administration's request of only $1.6 billion is a proposed cut in funding for sewage treatment construction of $400 million below current levels. At a minimum, we recommend that the program be funded at the current baseline level.

Water Quality Management Grants (Section 106)--$87.1 Million

We concur with the president's request for these grants to the states. The Clean Water Act rightfully gives the states many responsibilities for planning, enforcement, permitting, standards-setting and monitoring. Section 106 Water Quality Management grants in part help the states to fund their programs and meet these responsibilities. The Association of State and Interstate Water Pollution Control Administrators estimates that the Water Quality Act of 1987 doubled these responsibilities. Last year the committee appropriated $73.5 million of the $75 authorized for these grants. This year the Administration has requested $81.7 million. We agree with this request, recognizing that this amount is above the authorization for the program. The additional funds will help to partially offset the loss of set-aside funds previously available to the states in the Construction Grants Program.

Water Quality Cooperative Agreements--$16.5 Million

We also concur with the administration's request to provide $16.5 million to the states under Section 104(b)(3) of the Clean Water Act. The administration has requested this funding as another means to partially offset the loss of funds resulting from the termination of the Construction Grants Program and its associated set-asides.

Water Quality Enforcement--$27.9 Million

Key to the effectiveness of our ability to protect and restore America's water quality is EPA's ability to enforce the requirements of the Clean Water Act. We agree with the administration's request for the enforcement program as it represents an increase of 28 percent over current levels.

Great Lakes Program--$15.9 Million

The restoration of water quality of the Great Lakes is tremendously important to our members, many of whom are actively involved in efforts to achieve that goal. The administration has requested $12.2 million for the Great Lakes program in FY91. We recommend that the committee provide full funding of $15.9 million for this program.

The Chesapeake Bay Program--$13 Million

Chesapeake Bay is the nation's largest and historically the most productive estuary. Both Congress and the last administration singled the Bay out for special effort by both the past administration and Congress in the Water Quality Act of 1987. The administration has requested $12.2 million for FY91. Last year Congress provided over $12.8 million. We ask the committee to fund the program fully in FY91 at a level of $13 million.

Coastal Environment Management and the National Estuaries Program--$34.9 Million

We support the administration's request for these programs and urge the committee to provide for $34.9 million. A portion of these funds support The National Estuaries Program authorized under Section 320 of the Clean Water Act by the 1987 amendments. This program is extremely important in that estuaries are among the most productive of the nation's waters and the most threatened, receiving pollutants carried downstream from inland sources. The program seeks to restore specific national priority estuaries through the cooperative efforts of all levels of government.

In addition, EPA's Near Coastal Waters initiative seeks to remedy major coastal pollution problems and supports the implementation of Great Lakes Remedial Action Plans and Lakewide Management Plans.

Clean Lakes Program--$15 Million

America's publicly owned lakes are vital to outdoor recreation and are a resource important to our members. The Clean Lakes Program, authorized by Section 314 of the Clean Water Act, is critical to protecting and restoring lake water quality. The program helps assess and remedy problems such as siltation, eutrophication, toxic pollution and acidification of lakes across the nation. The administration has requested no funds for this program, which carries an authorization of $30 million. Last year Congress provided $9 million and we urge the committee to provide $15 million in FY91.

Well Head Protection Program--$8 Million

In addition to funding for surface water quality programs, we are also concerned about protecting the nation's groundwater resources and support implementation of the Well Head Protection Program authorized under the Safe Drinking Water Act. The administration has requested no funds for this program nor has Congress ever provided funding. The program has an authorization of $35 million in FY91. We urge the committee to provide $8 million.

Council on Environmental Quality--$2.78 Million

We support the president's plans to revitalize CEQ and his proposed budget of $2.78 million for FY91.

In closing, we would like to urge again that funding for all environmental protection programs administered by EPA and the states be placed high on the subcommittee's list of funding priorities for FY91. In addition, we thank you for your continued support of clean water and for this opportunity to present our views.

STATEMENT OF LIN EICHMILLER, ASSOCIATION OF STATE AND INTERSTATE WATER POLLUTION CONTROL ADMINISTRATORS

STATE REVOLVING LOAN FUNDS CUT

Senator **Mikulski**. Now, we'd like to turn to Lin Eichmiller for the Association of State and Interstate Water Pollution Control people, because I know you too have some interesting ideas on water.

Ms. **Eichmiller**. We certainly do.

The association appreciates this opportunity to testify and is very appreciative of the support that you've given clean water in the past.

We are concerned about the administration's budget because it does cut 20-percent support to State revolving loan funds—and of course Maryland is up and running with their fund, as well as 44 other States—and support for State implementation of the Clean Water Act by 9 percent. We would ask the committee to sustain or reverse this decrease in support.

Specifically, at a minimum, we would ask that the State revolving loan fund be maintained at this current funding level and that that level be taken out to 1994 to fully capitalize the State revolving loan fund. We do support the administration's request for section 106 financing to implement the Clean Water Act. Their request is $81 million and we support that wholeheartedly as a very positive step toward implementing the many complex requirements and resource-intensive requirements of the 87 amendments.

In regard to the $16.5 billion that the administration requests to create a new cooperative agreement approach to State implementation of the Clean Water Act, we would ask that those funds be incorporated into section 106 for the NPDS, because that program is becoming very expensive with toxic—we would ask, as I said, that $16.5 billion that EPA would like to see go to special projects, actually go to the States to implement the act.

And, finally, we do wholeheartedly support the funding—full funding—for the nonpoint source program and, at a minimum, would ask that last year's level be sustained, that $40 million, and as well that clean lakes be maintained at a minimum at their existing level of $10 million.

Thank you. And once again, we do really appreciate your support.

Senator **Mikulski**. Well, you can't be a Chesapeake Bay Senator and not believe in water.

Ms. **Eichmiller**. That's right.

Senator **Mikulski**. Also it is, again, a significant issue facing urban areas. One of the issues involved in lead paint—or, excuse me, lead ingestion, is aging water supplies where lead is a factor. And I think lead is going to be one of the growing issues of the 1990's.

I'd like to come back to that even in my questioning because this committee has a keen interest in it. But we want to be sure that Mr. Ralph de Gennaro, of the Friends of the Earth, gets his testimony in before I go to some of the questions that I have.

STATEMENT OF RALPH DE GENNARO, FRIENDS OF THE EARTH

Mr. DE GENNARO. Thank you, Madam Chair.

I hope you will take my appearance here for the first time ever before this subcommittee as a signal that the environmental community had decided to get much more serious about the appropriations process as a whole. I mean this as no criticism of my colleagues here and of the many environmental groups who have done first-rate work on narrow environmental programs, such as wastewater grants or nonpoint source pollution. In fact, Lin and David have been showing me the ropes.

ENVIRONMENTAL COMMUNITY CLAIMS INSUFFICIENT FUNDING

However, the major national environmental groups themselves concluded last year that it just wasn't enough. We must do better. Too many good environmental laws and program are failing for lack of funds. And the environmental community needs to focus more effort on seeing that existing laws get adequate funding. This is why the major national environmental groups decided to create my position.

I direct the environmental appropriations project, whose only purpose is to significantly increase funding for all environmental programs, with a high priority given to those programs under the jurisdiction of this subcommittee. While this project is directed by Friends of the Earth, our intent is to be accountable to the broad coalition of national environmental organizations.

I'd like to be clear that my testimony today is presented only on behalf of the 50,000 members and supporters of Friends of the Earth. However, I believe it's fair to say that I reflect the general concerns of the environmental community.

I'm no Jack Kennedy, but I'd like to paraphrase him and say that we'd like to emphasize today what we can do for this subcommittee in addition to what we would like the subcommittee to do for us. We support efforts to get the full Senate to recognize the growing responsibilities of this subcommittee and that that will require an increasing budget allocation to maintain our lead in space university research, our care for aging veterans, address our housing crisis and protect the environment, it will simply cost more money.

Second, we're in the process of achieving an adequate budget resolution which reflects these needs. Our efforts succeeded in increasing the House Budget Committee's allocation for EPA operations for clean air by $80 million this year. And we worked with the Senate Budget Committee on the same thing.

"GREEN BUDGET"

Like the veterans community has done so effectively, we hope to eventually produce a comprehensive "green budget" that presents the consensus funding priorities of the environmental community in a unified and simple form.

Senator MIKULSKI. That would be fantastic. I don't know if our veterans are still in the room, but that has been, not only extremely helpful from the standpoint of budget allocation, but it gives us programmatic insights on everything from how long something take to be approved and, not to go into every detail, but thanks to the veterans' independent budget, I get a sense of what's happening to veterans when they call an office, not only from my own moving around Maryland. We can prove that and then allocate our resources where the greatest needs are.

So I think a "green budget" is not only good for the environment but a "green budget" is very good for the budget. So we look forward to that.

Mr. **Dickson**. OK. I'd like to just highlight two important points on the NASA side, I'd like to submit for the record testimony of Dr. Brent Blackwelder on a number of environmental organizations. This testimony strongly supports making NASA's top priority the Mission to Planet Earth Earth Observation System.

And the testimony also opposes diverting scarce resources at this time for a return to the moon or a manned mission to Mars.

Senator **Mikulski**. And, without objection that testimony is accepted for the record.

[The statement follows:]

STATEMENT OF DR. BRENT BLACKWELDER

MADAM CHAIRWOMAN. WE APPRECIATE THE OPPORTUNITY TO STATE FOR THE RECORD THE ENVIRONMENTAL COMMUNITY'S STRONG SUPPORT FOR NASA'S MISSION TO PLANET EARTH / THE EARTH OBSERVATION SYSTEM (MPE/EOS) AND OPPOSITION TO SPENDING MONEY AT THIS TIME FOR A RETURN TO THE MOON OR A MANNED MISSION TO MARS. WE BELIEVE THAT MPE / EOS SHOULD BE THE TOP PRIORITY FOR OUR NATION'S SPACE PROGRAM IN THE FORSEEABLE FUTURE.

NASA CAN PLAY AN ESSENTIAL ROLE BY ENABLING THE U.S. AND FOREIGN GOVERNMENTS TO DETERMINE THE RATE AND DEGREE OF GLOBAL ENVIRONMENTAL CHANGES AND TO ANTICIPATE IN A TIMELY MANNER THEIR IMPLICATIONS. NASA'S EARTH SCIENCES DIVISION HAS ALREADY MADE ONE OF THE MOST OUTSTANDING CONTRIBUTIONS TO UNDERSTANDING OF GLOBAL CLIMATE CHANGE BY UNCOVERING THE CAUSES OF THE OZONE HOLE OVER THE SOUTH POLE AND BY DISCOVERING THAT THE STAGE IS SET FOR OZONE DEPLETION AT THE NORTH POLE.

WE FEEL STRONGLY THAT MISSION TO PLANET EARTH (MPE) IS AN IMPORTANT ENVIRONMENTAL PROGRAM WITH FAR REACHING IMPLICATIONS FOR UNDERSTANDING, PREDICTING AND MITIGATING GLOBAL WARMING AND CLIMATE CHANGE. THE PROGRAM WILL ALSO PROVIDE DATA AND SERVICES WITH IMPORTANT APPLICATIONS TO SPECIFIC ENVIRONMENTAL ISSUES. THESE ISSUES INCLUDE OFFSHORE OIL SPILLS (MPE SHOULD BE ABLE TO MONITOR THE BREADTH, DEPTH AND OVERNIGHT / BAD WEATHER MOVEMENT OF OIL SLICKS), AGRICULTURAL PLANNING (SOIL MOISTURE, STRESS IN PLANTS, DROUGHT PREDICTION), EARTHQUAKE PREDICTIONS (SCIENTISTS ANTICIPATE THAT MPE WILL MONITOR 1/2 INCH MOVEMENTS IN THE EARTH'S CRUST, AND SIGNIFICANTLY IMPROVE OUR ABILITY TO UNDERSTAND AND PREDICT EARTHQUAKES, RAINFOREST MONITORING (INCLUDING WORLDWIDE MEASUREMENT OF THE DEPTH OF THE FOREST BIOMASS, AN IMPORTANT FACTOR IN UNDERSTANDING GLOBAL WARMING), MONITORING OF INTERNATIONAL ENVIRONMENTAL AGREEMENTS SUCH AS TREE PLANTING AND CLEAR CUTTING AGREEMENTS, AND, AIR POLLUTION MONITORING AND CONTROL.

WE ANTICIPATE THAT THE USE OF TECHNOLOGIES DEVELOPED PRIMARILY FOR DEFENSE AND SCIENCE IN THE LAST DECADE, PARTIALLY EMBODIED IN MISSION TO PLANET EARTH / EOS, WILL HELP US TO CREATE A NEW SCIENCE-BASED INFORMATION ERA IN RESOURCE MANAGEMENT, POLLUTION MONITORING, AND CLEAN-UP TECHNOLOGY IN THE COMING DECADE, BOTH IN THE UNITED STATES AND ABROAD. MPE / EOS IS AN IMPORTANT AND HIGHLY SIGNIFICANT STEP IN THIS DIRECTION.

WE URGE YOUR STRONG SUPPORT FOR MISSION TO PLANET EARTH / EOS. WE ARE CONCERNED THAT NASA'S MPE / EOS MAY NOT RECEIVE PRIORITY ATTENTION IN VIEW OF SPACE

EXPLORATION INTITATIVES RECENTLY PROPOSED AS NATIONAL PRIORITIES ON THE 20TH ANNIVERSARY OF THE MOON LANDING; NAMELY, A RETURN TO THE MOON AND A MANNED MISSION TO MARS.

THE ESTIMATED COST OF A RETURN TO THE MOON ALONE WILL EASILY EXCEED $100 BILLION OVER 20 YEARS. ESTIMATES MADE SEVERAL YEARS AGO FOR A MANNED MISSION TO MARS INDICATE THAT THE COST OVER 10 YEARS WOULD REACH $300 BILLION.

IN CONTRAST TO THIS SPACE EXPLORATION, MPE / EOS CANNOT WAIT. WHILE WE UNDERSTAND THAT PEACEFUL OBJECTIVES CAN BE OBTAINED THROUGH A JOINT MISSION TO MARS WITH THE SOVIETS OR WITH A LUNAR BASE, THE MISSION TO PLANET EARTH / EOS IS ALSO A MAJOR, JOINT INTERNATIONAL PROGRAM INVOLVING OVER 10,000 SCIENTISTS AND 19 GOVERNMENTS WORLDWIDE. CANADA, JAPAN AND 13 EUROPEAN NATIONS REPRESENT AN INTEGRAL PART OF THE MISSION TO PLANET EARTH / EOS PROGRAM. THUS, IT IS LIKELY MPE / EOS IS THE LARGEST INTERNATINAL SCIENTIFIC UNDERTAKING IN THE HISTORY OF HUMAN CIVILIZATION.

MPE / EOS IS LESS EXPENSIVE THAN A TRIP TO THE MOON OR TO MARS AND CAN BE DONE MUCH SOONER BECAUSE THE TECHNOLOGIES FOR IT ALREADY EXIST. IT IS EXTREMELY RELEVANT TO URGENT ENVIRONMENTAL PROBLEMS FACING THE U.S. AND FOREIGN GOVERNMENTS. IT SHOULD BE DONE AS THE NEXT MAJOR SPACE PROGRAM INITIATIVE AND BEFORE MAJOR SPENDING FOR ANY OTHER SPACE INITIATIVE IS INCURRED. FURTHERMORE, MISSION TO PLANET EARTH / EOS IS NOT CONTINGENT ON A MANNED ORBITING SPACE STATION WHICH HAS ENCOUNTERED CONGRESSIONAL CRITICISM. WE SHARE THIS CONGRESSIONAL CONCERN ABOUT THE COSTLINESS OF SUCH A SPACE STATION IN VIEW OF PRESSING BUDGET DEFICITS.

IN THE REMAINDER OF THIS STATEMENT, WE WOULD LIKE TO ADDRESS IN MORE DETAIL SOME OF THE PRESSING NEEDS FOR MPE/EOS. SCIENTIFIC UNDERSTANDING OF THE EARTH AS A WORKING ECOLOGICAL SYSTEM IS RUDIMENTARY AT BEST. ALTHOUGH EARTH SCIENCES DATA HAS BEEN COLLECTED OVER THE LAST TWO DECADES, THE PROGRAM HAS BEEN AD HOC. WHILE MAXIMUM USE OF EXISTING DATA MUST BE MADE, EXTENSIVE DATA IS LACKING, ESPECIALLY FOR THE PURPOSE OF INCREASING OUR CAPACITY TO PREDICT THE VERY SIGNIFICANT BUT COMPLEX INTERACTIONS BETWEEN VEGETATION, CLOUDS, OCEAN CIRCULATION, AND GLOBAL TEMPERATURES.

MPE/EOS WILL ALLOW ENVIRONMENTAL MANAGERS AND POLICY MAKERS TO PREDICT CHANGES IN GLOBAL CLIMATE AND THE ABILITY OF GLOBAL, REGIONAL AND LOCAL ECOSYSTEMS TO SUPPORT LIFE AND SUSTAIN HUMAN ACTIVITY. THE PROGRAM WILL ALLOW THE MONITORING OF WARMING TRENDS WITH SIGNIFICANTLY IMPROVED ACCURACY, THE IDENTIFICATION OF CAUSES OF WARMING AND THE PREDICTION OF ITS EFFECTS. SPACE MONITORING WILL HELP TO IDENTIFY ENVIRONMENTAL DEGRADATION PATTERNS EARLIER AND IN MORE DETAIL THAN GROUND-BASED DATA. SPACE MONITORING AVOIDS SOME SERIOUS LIMITATIONS OF JURISDICTIONAL LINES.

GLOBAL WARMING WILL HAVE SIGNIFICANT IMPACTS ON WATER QUALITY AND AVAILABITY, BIOLOGICAL DIVERSITY, ENERGY NEEDS AND AVAILABILITY, FOREST COVER AND DESERTIFICATION, AGRICULTURAL PRODUCTION AND PESTICIDE USE, WETLANDS MIGRATIONS, OCEAN AND COASTAL ECOSYSTEMS AND FISHERIES, WILDLIFE HABITAT, POPULATION MIGRATIONS FOR HUMANS AND MANY ANIMAL SPECIES, AND LAND MANAGEMENT AND USE. GLOBAL WARMING STUDIES TO DATE INDICATE THE POSSIBILITY OF TRAUMATIC INTERRUPTIONS TO NATURAL ECOSYSTEMS AND FORESTS, SEVERE REGIONAL DISPLACEMENT OF AGRICULTURE, AND ENORMOUS COSTS FOR COASTAL AREAS. HOWEVER, THE DATA ON SUCH IMPACTS NEEDS TO BE IMPROVED AND REFINED. MPE/EOS WILL REFINE ANALYTICAL ABILITY IN ALL THESE AREAS, VASTLY IMPROVING THE QUALITY OF MEASUREMENTS AND PREDICTIONS.

IN CONCLUSION, IT IS MISSION TO PLANET EARTH / EOS, NOT THE SPACE STATION OR VENTURES TO THE MOON OR MARS, WHICH SHOULD BE THE TOP PRIORITY FOR OUR NATION'S SPACE PROGRAM. WE NEED YOUR SUPPORT AND AN AGGRESSIVE SCHEDULE ON THE ORDER OF SEVERAL HUNDRED MILLION DOLLARS FOR THIS MOST IMPORTANT SPACE AND ENVIRONMENTAL INITIATIVE.

ON BEHALF OF:

MICHAEL OPPENHEIMER, ATMOSPHERIC SCIENTIST,
ENVIRONMENTAL DEFENSE FUND

MICHAEL FISCHER
PRESIDENT, THE SIERRA CLUB

DR. PETER MYERS
BORAD MEMBER, NATIONAL AUDUBON SOCIETY

BROOKS YEAGER
VICE PRESIDENT FOR GOVERNMENT RELATIONS
NATIONAL AUDUBON SOCIETY

JOHN TOPPING, EXECUTIVE DIRECTOR,
THE CLIMATE INSTITUTE

MAITLAND SHARPE
ISAAC WALTON LEAGUE

MARGARET OWINGS, PRESIDENT,
FRIENDS OF THE SEA OTTER

RICHARD CHARTER, DIRECTOR,
CALIFORNIA LOCAL GOVT. COORDINATION PROGRAM

R. NEIL SAMPSON, EXECUTIVE VICE PRESIDENT
AMERICAN FORESTRY ASSOCIATION

DAN LASHOFF, SR. SCIENTIST FOR GLOBAL WARMING,
NATURAL RESOURCES DEFENSE COUNCIL

LYNN GREENWALT, VICE PRESIDENT, INTN'L. AFFAIRS,
NATIONAL WILDLIFE FEDERATION

ANDY PALMER, WASHINGTON DIRECTOR
AMERICAN OCEANS CAMPAIGN

SARAH CHASIS
NATURAL RESOURCES DEFENSE COUNCIL

EPA OPERATING BUDGET

Mr. Dickson. And the second point I'll touch on is the EPA operating budget. This is our highest priority in this subcommittee.

The EPA operating budget is now lower in real terms than it was 13 years ago in fiscal 1979. Meanwhile, in those 13 years, Congress has passed six major environmental laws and we've all learned a lot more about our environmental problems.

On top of this, Congress will likely today elevate the EPA to a Cabinet-level department. Madam Chair, most people think that when someone gets a big promotion, they should get a raise too. We think the EPA operating budget needs a raise.

One of the highest priorities and the largest increases in the EPA operating budget this year should come for clean air programs. The Senate has just spent 2 months debating the clean air program. We hope that this debate will lead to a recognition by the full Senate that this subcommittee will need a larger allocation to fulfill the hopes raised during those 2 months of debate.

The Senate Budget Committee put in another $350 million above the President's request for clean air in the reported budget resolution. And it remains to be seen how this will all play out, but we hope that's the first step in a recognition by the whole Senate.

Thank you very much.

[The statement follows:]

STATEMENT OF RALPH DE GENNARO, SR.

I hope you will take my appearance here for the first time ever before this subcommittee as a signal that the environmental community has decided to get much more serious about the appropriations process as a whole.

This is not a criticism of the many environmental groups who have done first-rate work on narrow environmental programs and achieved excellent results on programs such as wastewater grants and non-point source pollution. But the major national environmental groups themselves concluded last year that it just wasn't enough. We must do better. Too many good environmental laws and programs are failing for lack of funds, and the environmental community needs to focus more effort on seeing that existing laws get adequate funding. That is why the major national environmental groups decided to create my position.

I direct the Environmental Appropriations Project, whose only purpose is to significantly increase funding for all environmental programs, with a high priority given to those programs under the jurisdiction of this subcommittee. While this project is directed by Friends of the Earth, our intent is to be accountable to the broad coalition of national environmental organizations, and we will pursue funding priorities that reflect the goals of all of these organizations. I will work only on the Appropriations Committees, and also the Budget Committees to the extent they influence the appropriations process.

I would like to be clear that my testimony today is presented only on behalf of the 50,000 members and supporters of the Friends of the Earth. After a recent merger, Friends of the Earth now incorporates two other organizations, the former Environmental Policy Institute and Oceanic Society. However, I believe it is fair to say that my testimony reflects many of the broad concerns of the environmental community.

General initiatives

The Environmental Appropriations Project is working with other environmental groups on these key general initiatives:

1) We support efforts to get the full Senate to recognize that the growing responsibilities of this Subcommittee require an increasing budget allocation. To maintain our lead in space and university research, care for our aging veterans, address our housing crisis and do what we must to protect the environment, it will cost more money.

2) We are engaged in the process of achieving an adequate budget resolution which reflects these needs. Our efforts succeeded in increasing the House Budget Committee's allocation for the EPA operating budget by an additional $80 million for clean air. We assisted with a partially successful comprehensive environmental budget initiative in the Senate Budget Committee that we hope will become a model for next year.

3) Like the veterans community has done, we hope to eventually produce a comprehensive "green budget" that presents the consensus funding priorities of the environmental community in a unified and simple form that we hope will be useful to you.

We welcome any suggestions on how to pursue these goals.

Specific funding priorities

Following is an overview of our funding priorities for the fiscal year 1991 bill. I hope that particular environmental organizations may be able to share further particular suggestions or dollar levels in their areas of expertise, and would be pleased to assist you in that process as needed.

NASA -- On the NASA budget, I would like to submit for the record testimony by Dr. Brent Blackwelder on behalf of a number of environmental organizations. This testimony strongly supports making NASA's top priority the Mission to Planet Earth/Earth Observation System (MPE/EOS). The testimony opposes diverting scarce resources at this time for a return to the moon or a manned mission to Mars. Furthermore, we suggest that the President's request for the Mission to Planet Earth program be increased by $85 million. This is enough to advance the launch schedule from the fourth quarter to the second quarter of 1987. Also, we are concerned that the President's request provided no funds for the vital synthetic aperture radar, which would allow the Earth Observation System to better track oil spills and polluters, measure global warming and perform other valuable tasks. The synthetic aperture radar is now planned for a fiscal year 1993 start. We recommend that NASA's Jet Propulsion Laboratory be given an additional $10 million in FY 1991 to get the project started right away.

EPA operating budget -- This is our highest priority in this subcommittee. The EPA operating budget is now lower in real terms than it was in FY 1979, despite the fact that the EPA's workload has at least doubled. In the dozen years since 1979, Congress has enacted six major environmental laws requiring regulation of thousands more pollution sources and contaminants. On top of this, Congress will likely elevate the EPA to a cabinet-level department this year. Madam Chair, most people think that when someone gets a big promotion, he should also get a raise. The EPA operating budget needs a raise. In fact, 14 major environmental groups called in January for doubling the EPA operating budget in four years, starting with a 25 percent increase this year. In addition, we also strongly support this Subcommittee's previous actions to reduce funding for contracting and consulting services and increase the FTEs.

Specifically, we support the following program funding levels:

--Clean air implementation -- The President's request for an $82 million increase over last year for clean air programs is far too low. CBO estimates the total cost of the Senate-passed clean air bill at over $600 million. This would require an increase over the President's budget request for the EPA operating budget of approximately $350 million in the first year. The Senate Budget Committee has reported a budget resolution that assumes an increase of $447 million over a freeze level in FY 1991. We hope that this is the first recognition by the Senate that this Subcommittee will need a larger allocation to fulfill the hopes raised during two months of debate on the clean air bill.

-- Non-point source pollution control -- We support the fully authorized level for this important program, or at very least $70 million in FY 1991.

-- Superfund -- Friends of the Earth recommends that the Subcommittee approve the full $1.74 billion requested by the President for this program. The need is greater than ever. This year, there are more construction cleanup projects ready to go than funds to begin them. We have also supported legislative initiatives to reduce abuses by contractors and consultants in the Superfund program, and to put government employees fully in charge.

-- Wastewater treatment program -- We support the fully authorized level of $2.4 billion for this program, or at least the CBO baseline funding level.

-- LUST -- We support full funding of the Presidential request for this program.

-- Council on Environmental Quality (CEQ) -- We support full funding of the Presidential request for CEQ.

-- Other initiatives -- Friends of the Earth also supports adequate funding levels for the asbestos in schools program, the Chesapeake Bay program, EPA's international programs, ecological risk assessment studies of genetically altered microorganisms, and other programs about which we can provide specifics at another time.

Thank you.

OVERVIEW OF HUD BUDGET

Senator **Mikulski**. Well, thank you very much, Mr. de Gennaro, for what I think is a benchmark and hallmark testimony in which the—in addition to the fine testimony that we've received on the water analysis, presents a more overall view.

I'm very keenly aware of the fact that the environmental budget is down 13 percent and, if I might add, in housing. In 1980 dollars, the assisted housing budget is down over 80 percent, but let me put it in real dollars. In 1974, in a Republican administration, headed by Jerry Ford of Michigan, the last HUD budget that Carla Hills presented to the Congress was $24 billion. That was 16 years ago. Those are actual dollars that we used for housing.

In 1989, the last housing budget was $12 billion. So that gives you a sense of what's happened. We were able to increase that by $2 billion, which went really primarily in dealing with section 8 renewals that we had contracts out on and trying to modernize public housing. Our whole focus, and our desperate focus, was in the preservation of existing housing stock, and we had no resources to do new housing. That's why we came up with the FHA tool which was to generate more revenues, well-intentioned but we're concerned about the unintended negative consequences which you presented, Ms. Cincotta.

This year, in order to stay in place, we're going to need $21 billion or thereabouts, just to meet existing obligations in renewing section 8 contracts, which we are going to strive to do, as well as to continue our step on modernization. So we're aware of that.

We need the help of groups as the President is meeting now on the Budget Summit. Do not leave those negotiations only to the members. There needs to be a really grassroots swell momentum and so on, on the needs of our communities for water, sewers, infrastructure, housing, roads, schools and so on.

LEAD PAINT IN PUBLIC HOUSING

So I don't need to preach to you but let me get to the issue of lead. Mr. Cavanaugh, could you tell us your experience with the issue of lead paint and so on in public housing, and what do you think you need to do. And I'd like to get Ms. Cincotta's views as she's worked in the neighborhoods, if she sees this as an issue, and also where the environmental community would see the issue of lead proceeding. So that we not only look at the budget today but can anticipate some of the future responsibilities that we can undertake.

Mr. **Cavanaugh**. Ms. Mikulski, we've calculated that there are approximately 838,000 pre-1978 public housing units. All those are likely to contain lead. This week and last week the Council of Large Public Housing Authorities, the Public Housing Insurance Company, NFADA, have been conducting lead abatement seminars in three cities. And part of those seminars are to present to public housing leaders the devastating effects that lead in paint in apartments has on children.

Dr. Garrettson from Emory Medical School has been part of these three seminars and it's very depressing to hear the statistics of damage to nervous sytems and retardation that is taking place in leaded residences. There are statistics, incidentally, that show a very high correspondence of later performance in life with those who have had lead in their system at a youthful age.

I think what——

Senator **Mikulski**. Mr. Cavanaugh, do you think—first of all, not to interrupt, but 838,000 units, that's 60 percent of all public housing.

Mr. **Cavanaugh**. Yes, ma'am.

Senator **Mikulski**. That makes the United States of America one of the largest slum landlords out there.

Mr. **Cavanaugh**. And that's just—incidentally, that's just in public housing.

Senator **Mikulski**. That's a pretty astounding number.

Mr. **Cavanaugh**. Right. All the national evidence, by the way, is that public housing contains far less lead paints than does private housing. But the statute so far only is applicable to us.

Senator **Mikulski**. Well, Mr. Cavanaugh, do you feel that public housing and the studies that have been done at HUD and all the advisory thises-and thats really have developed a methodology to be able to get lead paint out? Because our experience has been that sometimes abatement techniques exacerbate the problem.

Mr. **Cavanaugh**. The comprehensive modernization program will be a great remover of leaded surfaces. However, as you can tell from the testimony, we're 10 years away at least from comprehensively modernizing the public housing stock. Additional methods are going to have to be developed by HUD and EPA to guide not only public housing but the huge stock of private housing that is infested with lead.

I don't think the country frankly realizes what—the size of the wave that's coming their way. We're awash in it in public housing. We're only 1 or 2 percent of the Nation's housing stock. It's going to be an enormous issue soon.

The Department, in many ways, has been slow getting off the mark. I do think it's been aided greatly by the leadership from the Hill. But it could use, I think, some stronger involvement by them than we see currently. Certainly, their budget document is sad, to think that they can't even mention what is the major housing problem for health in the country.

Senator **Mikulski**. Ms. Cincotta, would you comment on it, what you see from your perspective?

PROPORTION OF CHILDREN IN PUBLIC HOUSING

Ms. CINCOTTA. I think you see or you hear rather—there's more proportionately children in public housing. As you go down into multifamily buildings that are not public housing in Chicago where, again you get a higher proportion of children coming down from public housing, what we find is that there's a special committee of citizens in Chicago called the Lead Committee, trying to get money and using and putting CDBG dollars in to lead abatement, lead testing. And you work between the health department and the building department consistently. But there's not enough money. But it's in the area where there's the most kids.

As I said, public housing, where there's a lot of kids proportionately to adults, multifamily buildings in cities like Chicago, where there's more proportionate. And it's in the bungalows but, when you have older people, you hear less of the problems because they're not going to chew on the window sills the same as the kids will.

But all we do is, we get the money from CDBG, and if there's not enough CDBG money, you're just fighting it from one part of CDBG, where it go to, to another.

Senator MIKULSKI. Well, thank you.

You know, you're talking about the children. I'd like to acknowledge the fact that Mount Vale, NJ, Elementary School is here and, to their teachers and to the children in the room, what we're doing is trying to see how we can improve America's housing and America's environment. We're focusing on the issue of lead for this segment of the discussion, because lead kills and lead handicaps.

A statistic given to me by a public health official at Johns Hopkins tells me that it costs $8,000 to clean the blood out—the lead out of the blood of a child. That's a tragedy. And that's $8,000 out of Medicaid that could be used for that child's prenatal care, early detection, and other access to medical treatment.

Mr. Lowe, do you want to comment on it from the mayors' perspective, and then I'm going to get some sense from the environmental community what they think the issue is and how we should begin to focus our discussion.

Mr. LOWE. Yes; we began to look at this problem from any number of perspectives. And, naturally, it demands that we try to get a large perspective on it. As Mr. Cavanaugh has said, there's going to be a very large problem that's coming down the pike.

We have also been concerned, in terms of our city lobbyists in Washington, the city representatives, those people who represent individual cities, Los Angeles and Baltimore and those cities around the country, with whether or not abatement also makes the problem much worse than what it actually is in the very beginning.

We know that it's going to be a problem for cities but the problem that we have is just how much is it going to cost, the size of it, magnitude of the problem. It's going to be more than just a public housing problem. And we're still looking at it. We're looking at it from any number of points of view.

We have the environmental concerns that the mayors are looking at. We have a strong environmental sector at the Conference of

Mayors. We do environment and we do housing and we do across the board. And it's going to be a problem that we will address and we hope to get some help from the Federal government.

Senator **Mikulski**. Do you have a task force working on this?

Mr. **Lowe**. We have several—we don't have a task force that's appointed to this. We have an environmental committee; we have the housing subcommittee, which we will look at the public housing problems and also human resources. When you talk about children, the impact on children, we'll be looking at it from that point of view also.

We're about to start a new children's task force. I'm sure they will take a look at that part of the problem also. We have some of the same kinds of problems you have here in Congress. Everything's divided up so many different ways.

Senator **Mikulski**. I know. Could we turn to the environmental community and see what their thoughts and recommendations would be?

Mr. **de Gennaro**. Yes, Madam Chair. We would strongly agree that this is a big problem and we're going to have to devote an increasing amount of money to it and ramp up. We would probably caution that, as we go in, we look at the amount of money that can be absorbed and the effectiveness of the programs and sort of carefully consider what we're doing.

If I could offer one other broad comment, and that is that we, in the environmental community, are struggling to broaden our perspective and go beyond what is perceived by many people as a white movement. And the problem of lead paint is, by no means, only a minority problem. But it certainly is an important concern to the minority community. And we think that, for many children, the environment is not trees or streams or mountains, it is the city, and that part of the environment deserves our full attention also.

Senator **Mikulski**. Isn't lead in the water supply a problem?

Ms. **Eichmiller**. Yes. I'd like to comment just from the environmental perspective of lead and other pollutant issues. As I testified, we have requested you to maintain the $2.4 billion level for the state revolving loan fund through 1994.

Now that takes on some added significance. Because we, as an association, at the request actually of Mr. Traxler, came to grips with the fact that we have to now look for post-1994 on what environmental infrastructure program we really need.

So we have made a commitment to work on that in a multimedia area. And I think that, by 1994, some of these issues may come together and hopefully we will have a strong, broad environmental infrastructure perspective in the financing area.

Senator **Mikulski**. Does Izaak Walton League have anything to say?

Mr. **Dickson**. Basically only to second what my colleagues have said, Madame Chair, and that, from our perspective, we are not terribly involved in the drinking water supply issues. But I would say we are very concerned that the resources be available to deal with the problem in terms of the basic supply, and that is water quality. And to say that we know that lead is a significant component of urban runoff. It's something we need to deal with.

Thank you.

Senator **Mikulski**. Well, one of the big things that Congress did that I felt was a significant public health measure is when we banned lead in gas. And that had a tremendous impact on cities, like the Chicagos and the Baltimores and the Los Angeleses, as well as our rural areas.

FEDERAL GOVERNMENT AS MODEL LANDLORD

Mr. Cavanaugh, I know that—and Ms. Cincotta and Mr. Lowe—that a good part of the lead-based paint is in private sector housing. However, I truly believe that the Federal Government should be a model landlord, which is one of the reasons we boost modernization. We shouldn't be slum landlords. That's No. 1.

And No. 2, on the techniques around abatement, I truly believe if cities showed that they could abate it in public housing and have the tools and techniques, we then—the private sector—could learn from it. Also you would develop a contractor capacity, a liability insurance standard—all of those things would happen. And that's why I'm so hot, if you will, on public housing taking the lead to show the way.

One, we could solve a concrete public health problem. But, at the same time, develop the techniques and so on to help in the communities.

Mr. **Cavanaugh**. I believe that's exactly what's happening.

Senator **Mikulski**. So what do we need to get HUD to do?

Mr. **Cavanaugh**. Your own city housing authority, by the way, has been in the forefront of this. I think currently the housing authorities are providing leadership that perhaps one might have thought of coming from other quarters. And of course we've asked for funding in our testimony that reflects the added cost of all this.

LACK OF INSURANCE

To give you some idea—it's a very complicated problem; I won't go on here about it—but we've had a forum, basically our own insurance company, to be able to get coverage for the housing authorities, the architects and engineers and the contractors who are now going to carry out the comprehensive mod program.

The program was in jeopardy of really coming to a complete halt because of the lack of insurance from commercial sources or any remedy from HUD. And I wouldn't want to not alert you to that issue. Because the housing authority insurance company is only going to be able to cover so much of the risk of the activities that are going on. And under the regs of HUD, you can't proceed without it.

The Department—I think that the Appropriations Committees have done much to get EPA more fully in the involvement in setting—trying to set standards which are lacking in many areas here, in trying to do training, trying to bring the HUD field staff up to current practices.

It's been a little slow coming but your report in both 1989 and 1990 appropriations bills has led to getting these two agencies dancing a little more smoothly together. And we're hoping that the product will be helpful for everybody, but most important to help the children.

Senator **Mikulski**. Well, we're going to keep working on that. Ms. Cincotta, did you have something to add before we close?

ONE-TO-ONE REPLACEMENT

Ms. **Cincotta**. One of the problems that we've seen on the public housing is that we push very hard for one to one replacement of public housing to be funded by the Government. And, when we looked at it close and we talked to the folks at HUD, they're talking about one-to-one replacement of occupied units.

So what's happening within the city, we're 40-percent vacant in our public housing. And the more that's being vacated, story by story, some because of lead paint, some because there's no money for rehab. So when you get the one-to-one replacement, you're talking about occupied only and they're talking about selling off the public housing and it's just shrinking—puts more of the burden on the regular housing of the city.

With CDBG getting cut, it's like nobody cares. And we have done so much with the private sector in putting together the partnership. And I think it's about time that HUD and the Federal Government gets in that partnership. It's scary where—what I see happening in the Senate, of the time they spent in putting the HOP program together. We had proposed a housing block grant for housing paid for by user fees—penny on a Ginnie Mae certificate, a national real estate transfer tax. But it would be $20 billion, and matched by the cities and States.

What's sad is the idea, housing block grant, was picked up. The name was picked up, and what you're getting out of the Senate and the Housing Committee is going to be a—I don't want to swear—bastardized version—is that OK to say—where it's called a housing block grant; it's folded in the HOP plan. Everything—all the entitlements are folded in and we have said public housing should be a separate obligation.

So that what you're getting is $1.6 billion, maybe. And everything's—it says $2.1, but when you fold in the entitlements, it's $500 million. So it brings it down to $1.6 billion. But it's called a housing block grant.

And it takes the word and the intention and a way to get the money, and puts it all in one bag and it doesn't cut it, plus it creates another bureaucracy over there at HUD that we don't need.

I'll stop at that. We're very frustrated.

Senator **Mikulski**. Well—and I think you should be. And I think your critique is an excellent one.

First of all, replacement of occupied units, we know one-third of the units are not occupied because they're not fit for habitation.

Ms. **Cincotta**. Right.

NEED FOR MODERNIZATION

Senator **Mikulski**. Meaning the need for modernization, upgrading, plumbing—just basic infrastructure. We need to—and public housing is the first to say that. You see boarded up public housing units. We want to take down the boards and put the people in through modernization. So we concur on that.

The other is, in terms of the new authorizing bill that's pending in the Senate, I think your comments and your critique are well taken. I hope you would convey that——

Ms. CINCOTTA. We have.

Senator MIKULSKI [continuing]. And I think you've got some innovative funding ideas as well.

We're now—I'll tell you, the subcommittee is moving slower than we had hoped for, not because of the lack of a quickstep chairperson, but with the budget process now, we're not sure what our allocations are going to be. But I can tell you, my focus will be on where we can put the resources, where the needs are, and particularly out into the local communities. The funding of community development block grants will continue to be of our most high priority, as well as then meeting our obligations in section 8 and in public housing modernization, until a lot of more this. And whatever we can do to promote housing—new housing and then trying to deal with this FHA quagmire.

Ms. CINCOTTA. Give you $5 billion more if you clean it up with us.

Senator MIKULSKI. Oh, I believe it. And in the environmental community, again we've asked Mr. Reilly to give us a risk-based strategy and where can we do the most good. We say that because sewage treatment, you know, you don't get headlines; you don't get bylines and so on. But without that, this is a terrible problem facing our community, as well as then what are the greatest risks to our environment and to our public health. And let's put our resources in it.

You can get a real hot hearing going on cleaning up Superfund sites and practically minimal attention to indoor pollution. But again, indoor pollution, of which our buildings here—well, not only do we run budget deficits, we run oxygen deficits. But again, we're going to try to take whatever resources we have to focus on that in the environmental area.

So we thank you for your testimony. This has been a most informative hearing. And we will continue to rely on your consultation as we go through the process.

We feel that this hearing is for openers; it is not for closure.

Ms. CINCOTTA. Thank you.

SUBCOMMITTEE RECESS

Senator MIKULSKI. Thank you. This subcommittee will stand in recess until tomorrow, May 16, when we will continue our hearing from congressional and outside witnesses on the fiscal 1991 budget. The hearing will be held in SD–138.

[Whereupon, at 12:05 p.m., Tuesday, May 15, the subcommittee was recessed to reconvene at the call of the Chair.]

DEPARTMENTS OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT AND INDEPENDENT AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1991

WEDNESDAY, MAY 16, 1990

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10 a.m., in room SD-138, Dirksen Senate Office Building, Hon. Barbara A. Mikulski (chairman) presiding.

Present: Senators Mikulski, Garn, and D'Amato.

NONDEPARTMENTAL WITNESSES

HEARING PROCEDURE OUTLINED

Senator MIKULSKI. The subcommittee will be in order.

We have so much business we need to accomplish, we're going to immediately move to the witnesses. Because of the large number, we're going to ask you to limit your statements to 3 minutes and we will appreciate your support on that.

Later on this morning, I must recess the committee to go to a Federal highway meeting that deals with the bridge collapse in Maryland and I'll be right back.

This morning, I want to welcome everyone at the table and all those who will testify subsequently.

Our first panel includes Billy Frank of the Northwest Indian Fisheries Commission.

Nice to see you again, sir.

Mr. FRANK. Thank you.

Senator MIKULSKI. Nancy New of the National Conference of State Legislatures; Mr. Bill Reilly, the Philadelphia Air Management Service—I'll bet you take a lot of razzing—and Charles Reading of the Water and Wastewater Equipment Manufacturers; and Dr. Ringen of the Laborers International Union of North America,

Doctor, welcome.

Mr. Frank, why don't we start with you and your testimony. Please proceed.

ENVIRONMENTAL PROTECTION AGENCY

STATEMENT OF BILLY FRANK, CHAIRMAN, NORTHWEST INDIAN FISHERIES COMMISSION

Mr. **FRANK**. Thank you, Madam Chair.

My name is Bill Frank, chairman of the Northwest Indian Fisheries Commission. I represent 24 tribes in the Northwest and the State of Washington. Before we make our testimony, we'd like to thank the Chair and the subcommittee members for their support of the Northwest tribes in fiscal year 1990. Last year I testified in front of you and told you a little bit about our history in the State of Washington and the Northwest tribes.

Senator **MIKULSKI**. Yes; Mr. Frank, why don't we get right to the heart of the issue, and, with unanimous consent, your entire testimony and all of those present will be included in the record.

[The statement follows:]

STATEMENT OF BILL FRANK, JR.

Senator Mikulski, and honorable members of the Committee, I am Bill Frank, Jr., Chairman of the Northwest Indian Fisheries Commission (NWIFC). Present with me today are James Harp, Commissioner, Terry Williams, Commissioner and, James R. Anderson, Executive Director, here to assist in answering any questions you may have on our interest in this subcommittee's activities and budgets. We are here today to respectfully request appropriations from the Environmental Protection Agency's budget to assist twenty-four tribes and tribal organizations in Washington State for fiscal year 1991 to continue our efforts protecting the salmon resource from nonpoint pollution sources.

Before we present testimony we would like to offer our appreciation to the Chairwoman and subcommittee members for their support to the Northwest Tribes in fiscal year 1990. Though we are just beginning to implement these funds they will be helpful in developing a programmatic tribal approach for the protection of anadromous fish habitat from nonpoint source pollution problems.

To assist the Committee members, I would like to summarize background relevant to our request:

BACKGROUND

The NWIFC is here today representing twenty treaty fishing tribes in western Washington, and in eastern Washington, the Yakima Indian Nation, Colville Confederated, Spokane and Kalispell Tribes.

Washington State has been blessed with bountiful rivers and streams. Five species of Pacific salmon and three species of anadromous trout utilize Washington states streams during the fresh water stages of their life cycles. These anadromous fish support valuable sport, commercial, cultural and subsistence fisheries. At one time substantial quantity of fish production originated in lowland streams. These lowland streams have been severely impacted throughout the state by nonpoint sources of pollution. The cumulative impacts of contaminated runoff associated with urban, agricultural, and forestry activities; failing on-site septic systems leaching into ground and surface waters have reduced and destroyed the productive capacity of these streams.

Unfortunately, conflict between state, tribal and federal governments over the salmon resource and protection of its habitat have interfered our efforts to promote rapid correction and prevention of these widespread problems. Since the turn of the century the tribes in the Northwest have been in litigation concerning their treaty fishing rights with the State of Washington. Finally, in 1979 the United States Supreme Court reaffirmed the treaty tribes right to harvest fifty percent of the anadromous fish passing through tribal usual and accustomed areas. In 1980, the federal district court held that the United States and the State of Washington must not permit degradation of fish habitat which would diminish the treaty harvest right. The federal courts have recognized that protection of water quality and other attributes of fish habitat, including nonpoint pollution sources, are necessary to secure the Constitutionally protected rights of harvesting fish for the tribes.

The legal principles enunciated in *United States* v. *Washington* and other federal court decisions are the basis upon which the tribes are involved with off-reservation environmental issues. As a result of federal court decisions, the State of Washington has recognized the tribes as "co-managers of the fish resource in our state. As "co-managers" in Washington, the tribes must have the resources to adequately participate in environmental programs both off and on-reservation to ensure adequate protection of their treaty rights.

Rather than continue an era of conflict, the State of Washington has recently proclaimed a policy of working with the tribes on a government-to-government basis to resolve long-standing conflicts (See Attached Proclamation) In addition, the State of Washington, local governments, and federally recognized tribes are at the final stages of discussions concerning environmental disputes that fall within the scope of water quality and other natural resource issues. These discussions will outline a process by which the tribes, State of Washington, and local governments will work cooperatively together in order to seek resolution of environmental disputes and issues both on and off-reservation within the context of government-to-government relations.

In the context of government-to-government relations, the Tribes over the past several years have assisted in the development of local watershed plans to control and prevent nonpoint source pollution. The planning process has included state and local governments, and the general public. The Tribes are providing technical and policy support to the watershed planning and implementation activities. Examples of tribal involvement include: development of watershed planning regulations and criteria, sampling shellfish for toxic and bacterial contamination, conducting water quality sampling, and teaching workshops and education programs on nonpoint source pollution (See e.g. attached "EPA: Nonpoint Source News-Notes," March 1990, #4, pp.13-14). In the Puget Sound region, the tribes have participated in development of thirteen early action watershed plans for the protection and control of nonpoint source pollution. The tribes are entering into planning stages of thirteen additional watershed plans throughout Puget Sound. These efforts involved coordination with ten counties under the guidance of the Puget Sound Water Quality Authority's Management Plan.

Tribal participation is supported by state and local government officials (See attached letters of support). In addition, other counties are seeking to implement watershed plans and are requesting necessary tribal participation. However, infrastructure limitations place severe constraints on the tribes to continue a coordinated approach in participating and developing watershed plans for the control and prevention of nonpoint source pollution.

SUMMARY OF THE REQUEST

Federally recognized tribes in Washington State request adequate funding support to initiate tribal environmental programs and additional EPA staff to be involved in Indian relations and programs.

The Environmental Protection Agency's (EPA) established Indian policy (1984) of working with federally recognized tribes on a government-to-government basis concerns more than 375 Indian tribes in the lower 48 states controlling over 52 million acres of land base. The combined area of these Indian reservations is larger than all of New England, yet EPA now devotes only a tiny fraction of its personnel and funds to environmental protection for the Tribes. Even though the EPA has worked closely with the states to implement adequate environmental programs, little has been done to accomplish the same for the tribal governments. Indian tribes are two decades behind the states both in resources received from the EPA and in technical assistance provided by the EPA in developing tribal water program offices. The EPA's Indian policy has not been implement to any substantive degree for tribal governments It is long over-due that the EPA consider Indian tribes viable clients as they have done with the states.

On behalf of the Washington State tribes, we respectfully request; (1) the EPA to provide $30 million for tribal programs nationally, including an appropriate level of EPA staff devoted to Indian relations and programs. A portion of these funds and staff should be devoted to Indian water resource programs, and (2) the EPA to appropriate $6 million for the twenty-four tribes and tribal organizations in Washington State to establish programs to continue cooperative approaches for environmental protection. A "front end" investment will promote cooperation and increased tribal involvement in environmental protection as has been done between the EPA and state governments

The State of Washington supports tribal involvement in environmental protection both off and on-reservation. The state intends to work with the tribes on a government-to-government basis. Recently, the federally recognized tribes of Washington have met with State, local government officials, representatives of agriculture, business, fishing, recreation communities, and environmental interests to discuss a government-to-government process addressing water resource issues. The results of these discussions may propose a cooperative process between the tribes, state agencies and programs, and local units of government in areas of environmental protection.

Tribal-State discussions recognize that between governmental units, problems are often shared and the principle of comity between neighbors often serves the best interests of both. All participants to the Tribal-State discussions acknowledge there has been a gradual deterioration and loss of natural fish habitat in Washington State streams. Although there are many individual factors contributing to this, the general trend toward reduced production of habitat is the result of a combination of activities performed by humans—activities which alter and destroy water quality required for successful fish and wildlife production. The only potential means to deal with these problems is through cooperation between all affected jurisdictions

The tribes must be part of the solutions to prevent and control nonpoint source pollution in Washington State, and to protect their governmental interests and treaty fishing rights. The cooperative goals of the tribal proposal are:

One, prevent and reduce nonpoint source pollution in Washington State for the protection of anadromous fish and shellfish,

Two, to develop and apply the planning and education necessary in controlling nonpoint source pollution in Washington State,

Three, develop a coordinated information management system to compile and organize databases between the tribes and state and local governments for watersheds throughout Washington State,

Four, build an efficient tribal nonpoint program which is coordinated between the tribes and with the State of Washington and local governments in order to fulfill their rights and responsibilities as co-managers of natural resources, environmental issues for other tribes and states. Funding this program will provide invaluable information for the EPA's continued implementation of their tribal policies of government-to-government relations, protection of treaty resources, and enhancement of the environmental quality on reservations.

LETTER FROM GOV. BOOTH GARDNER OF WASHINGTON

April 24, 1990

The Honorable Barbara Mikulski
Chairperson, Senate VA HUD and
Independent Agencies Appropriation
Subcommittee
142 Dirksen Senate Office Building
Washington, D.C. 20515

Dear Senator Mikulski:

Washington State's relationship with federally recognized Indian Tribes has improved greatly in recent years. We have adopted a new policy of government-to-government relations with the tribes, and have developed an Accord that will implement that policy. Nowhere is this new relationship more important that in natural resource protection and management.

The continued success of a working relationship between the tribes and the state will be dependent in large part on the ability of tribes to participate in technical and policy issues with the state and local governments. The tribal funding that has been proposed by the Northwest Indian Fisheries Commission is critical to this process. Adequate funding would enable tribes to be active in the development, coordination and implementation of water quality policies and programs.

We fully support tribal involvement in this area and urge that you make adequate tribal funding a high priority.

Sincerely,

Booth Gardner
Governor

cc: U.S. Senator Brock Adams
U.S. Representative Norm Dicks
Christine O. Gregoire, Director, Department of Ecology
Northwest Indian Fisheries Commission

STATE OF WASHINGTON PROCLAMATION

STATE/TRIBAL GOVERNMENTAL RELATIONS POLICY

WHEREAS, it is the intent of the Governor of the State of Washington to confirm its government-to-government relationship with Washington tribes; and

WHEREAS, the State of Washington recognizes that there are 26 separate and distinct federally recognized Indian tribal governments located within the boundaries of the state; and

WHEREAS, the State of Washington and the tribal governments recognize the state contains 39 counties and numerous other local governments with independent and often overlapping interests and legal authority; and

WHEREAS, the State and tribal governments acknowledge that tribes and the state have historical relationships and unique rights shaped by federal and state constitutions, statutes, and treaties with the United States government and executive orders of the President;

NOW, THEREFORE, I, Booth Gardner, Governor of the State of Washington do hereby proclaim that the State of Washington accepts the fundamental principle and integrity of the government-to-government relationship between the State and the Indian Tribes, and that this principle shall be the basis of the State's Indian Tribal Governmental Policy.

Signed, this 3rd day of January, 1989

Booth Gardner

Governor Booth Gardner

GOVERNOR DECLARES STATE/TRIBAL RELATIONS POLICY

OLYMPIA -- Gov. Booth Gardner announced today that he has signed a proclamation formalizing the cooperative relationship that his administration has developed with the federally recognized Indian tribes of Washington.

Gardner's order declares that it is the policy of state government to conduct relations between the state and Indian tribes on a government-to-government basis.

The proclamation was issued in order to institutionalize the cooperative relationships that have developed over the past few years and have resulted in successful agreements such as the Timber, Fish and Wildlife agreement and the Puyallup land claims settlement.

"Formalizing these productive relationships between the state and tribal governments should help establish the kind of continuity that can lead to even greater success for the state, the tribes, and for everyone involved," Gardner said.

Gardner's proclamation is also intended to heighten the awareness within state government of tribal issues and tribal governments, and to clearly indicate the importance of such issues.

"Our policy is to work together with Indian tribes to solve problems, and this declaration serves to affirm the integrity of the principle of government-to-government relationships which is the foundation of cooperative problem solving," Gardner added.

STATEMENT OF TERRY WILLIAMS, COMMISSIONER, NORTHWEST INDIAN FISHERIES COMMISSION

Mr. FRANK. OK. Terry will start.

Mr. WILLIAMS. Yes; last year we made a request through Appropriations to EPA for $200,000 to set up a coordinating project amongst the tribes to be able to work with EPA. That was approved.

Also approved was a $1 million appropriation for FTE's within EPA to respond to the tribes. That has been held up to $1 million from OMB. We need to see that broken loose, so we can get to work.

This year's request is $6 million for the State of Washington tribes, the 24, with a $30 million request nationally for the tribes. We're looking at entering into agreements with EPA to work broad programs for on and off reservation impacts. We're also looking at incorporating into that different types of point source and nonpoint source problems.

We'd like to know if you have any questions. We'd be glad to answer those.

Senator MIKULSKI. Well, we thank you for your testimony. We particularly will notice the cooperative goals for the tribal program and see what we can do to help you.

Mr. FRANK. Thank you.

STATEMENT OF WILLIAM REILLY, STATE AND TERRITORIAL POLLUTION PROGRAM ADMINISTRATORS AND THE ASSOCIATION OF LOCAL AIR POLLUTION CONTROL OFFICIALS

Senator MIKULSKI. We're now going to move to Mr. William Reilly of the Philadelphia Air Management Services.

Mr. REILLY. Madam Chairman, members of the subcommittee, I'm William Reilly, assistant health commissioner for Air Management Services in Philadelphia. I'm testifying on behalf of STAPPA and ALAPCO, the national associations of State and local air pollution control agencies in 54 States and territories, and over 165 major metropolitan areas across the country.

The President's proposed budget includes $137.7 million for State and local air pollution control agencies, an increase of $38 million over the appropriation for fiscal year 1990. Although we are gratified that additional Federal funds will be appropriated this year, the increase falls far short of what is needed.

However, we recognize the importance of reducing our enormous Federal deficit and we understand that sacrifices are necessary. Accordingly, we concur that the amount recommended for fiscal 1990 is acceptable.

HEALTH OF MILLIONS OF AMERICANS AT RISK

The improvement and maintenance of our Nation's air quality ought to be one of the highest priorities since the impact of air pollution on public health and welfare is profound. The health of millions of Americans is at risk from exposure to such air pollutants as ozone, carbon monoxide, particulate matter, and toxics.

As you know, Congress likely will enact amendments to the Clean Air Act within the next several months. Although we applaud these efforts to improve the law, we are greatly concerned by the impact that insufficient resources will have on our efforts to expand our program. I might point out that in Philadelphia, PA, we are now funding our program at the rate of about 75 percent locally and only 25 percent federally. We've lost about 20 percent of our staff.

We have a lot of new programs, including extensive emission inventory development, State implementation plans, improving our monitoring system, and development of comprehensive permit and fee systems. The President's request was based on his proposed amendments to the Clean Air Act and there will be probably expanded programs in the bill that will be approved by Congress.

The comprehensive Clean Air Act Amendments under consideration are more stringent than the President's proposal and it is estimated that this will require an additional $60 million more to implement those programs. I wish to emphasize, in spite of the additional resources that will be needed, we still strongly support the adoption of these stronger programs.

In conclusion, we need the tools to do the job, and we're asking that Congress approve these additional appropriations proposed by the President's budget. Thank you.

Senator **Mikulski**. Thank you very much, Mr. Reilly, for that excellent analysis.

[The statement follows:]

Statement of William Reilly

Madam Chair, Members of the Subcommittee, my name is William Reilly and I am the Assistant Health Commissioner of the Philadelphia Air Management Services. I appear today on behalf of STAPPA—the State and Territorial Air Pollution Program Administrators, and ALAPCO—the Association of Local Air Pollution Control Officials, for which I am Chairman of the Program Funding Committee.

STAPPA and ALAPCO are the national associations of state and local air pollution control agencies in the 54 states and territories and over 165 major metropolitan areas across the country. The members of the associations have primary responsibility under the Clean Air Act for ensuring healthful air quality by implementing our nation's air pollution control laws and regulations.

On behalf of both associations, I thank you for the opportunity to testify on the proposed budget for the Environmental Protection Agency (EPA) for fiscal year 1991 and, particularly, on the Administration's request for grants for state and local air pollution control agencies under Sections 105 and 106 of the Clean Air Act.

The President's proposed fiscal year 1991 budget includes $137.7 million for state and local air pollution control agencies, an increase of $38 million over the appropriation for fiscal year 1990. Although we are gratified that additional federal funds will be appropriated this year, the increase falls far short of what is necessary for state and local agencies to adequately improve and maintain our nation's air quality. However, we recognize the efforts to reduce our enormous federal deficit, and we understand that sacrifices are necessary. Accordingly, we concur that the amount recommended for fiscal year 1991—$137.7 million—is reasonable.

The improvement and maintenance of our nation's air quality ought to be one of our highest priorities, since the impact of air pollution on public health and welfare is profound. In fact, according to an EPA report issued several years ago,the health, ecological and welfare risks from air pollution are higher than those posed by almost every other environmental medium. Similar analyses conducted more recently substantiate this conclusion.

Millions of Americans are exposed to the dangers posed by ozone, carbon monoxide, and particulate matter. The adverse health effects associated with exposure to elevated levels of those pollutants alone include chest pain; congestion; nausea; coughing; reduction of lung functioning; impairment to manual dexterity, visual perception, and learning ability; aggravation of existing respiratory and cardiovascular ailments; changes in the body's defense systems; damage to lung tissue; cancer; and even premature death.

In addition to the alarming dangers to human health associated with exposure to those pollutants for which national standards have been established, our citizens are severely threatened by other types of contaminants, including toxic air emissions. According to data collected under Section 313 of the Superfund Amendments and Reauthorization Act (SARA), approximately 2.4 billion pounds of toxics were emitted by industry into our country's air in 1988. The dangers to our health from these toxic emissions are frightening: the individual risk of cancer associated with exposure to routine releases of toxic air pollutants may reach as high as one in 100 in some locations. EPA has estimated that 1,700 to 2,700 excess cancer deaths per year may be attributed to air toxics alone.

The cost of air pollution in terms of public health is staggering: according to the American Lung Association, the health costs to our nation from air pollution may be as high as $40 billion annually. In addition, the cost of damage to materials, decreased agriculture and forest yields, and reduced visibility exceeds several billion dollars a year. Clearly, money spent to reduce and prevent air pollution Is a worthwhile investment.

In the past, state and local agencies have undertaken many essential activities to reduce air pollution for which adequate resources have been simply unavailable. In an attempt to manage our limited resources, we have been forced to cut costs to the point where our base programs have been severely eroded. During this period, federal funding for state and local air programs has remained fairly level and our purchasing power has actually diminished. Although great strides have been made, much remains to be accomplished if we are to protect the public health and welfare from the tremendous threat posed by air pollution. As a result, now, and in the future, we will be required to perform new essential duties to improve air quality, in addition to the programs we have traditionally implemented, while struggling with seriously constrained budgets.

As you are no doubt aware, it is likely that Congress will enact a comprehensive set of amendments to the Clean Air Act within the next several months. We applaud the efforts of Congress to improve the law that serves as the foundation of our nation's clean air program; we are eager to continue the task of cleaning our nation's air with the additional tools the legislation will afford us. We are greatly concerned, however by the impact that insufficient resources will have on our efforts to expand our programs.

The amendments will call for a tremendous effort by state and local air agencies to implement a host of new activities and programs, depending upon the severity of their air quality problems. These activities include the following: development of State Implementation Plans (SIPs), preparation of extensive emission inventories, enhancement of modeling programs, improvement of monitoring systems, development of comprehensive permitting and fee systems, implementation of enhanced automobile Inspection/maintenance programs, expansion of enforcement activities, adoption of Stage II Vapor Recovery, establishment of transportation control measures and a clean fuels program, and regulation of smaller sources. These measures are extremely important; however, they will be quite costly to implement.

The President's budget request was based on his proposed amendments to the Clean Air Act announced last year. If the new and expanded programs in the bill are taken into account, however, the recommended increase falls hopelessly short of what is needed for even the President's clean air proposal. If all of the additional efforts contained in just the Administration's Clean Air Act amendments were to be carried out effectively, state and local agencies could expect to spend millions of dollars above the President's proposal.

Furthermore, the President's budget request was based upon his proposed clean air amendments, rather than on the more stringent legislation currently under consideration. The comprehensive Clean Air Act amendments that will be debated in the House, H.R. 3030, and those adopted by the Senate, S. 1630, are more stringent in many respects than the President's proposal. As a result, it is likely that the law Congress ultimately enacts will be stronger than the bill upon which the appropriation request was based, requiring even greater resources for state and local agencies. While It is not known exactly what version of the bill will ultimately be adopted, it Is estimated that state and local air pollution control agencies will require over $60 million dollars more in federal appropriations than the total amount the President recommended. I wish to emphasize that in spite of the additional resources that will be needed, we strongly support the adoption of the stronger measures contained in the House and Senate bills.

Allow me to offer several examples of additional state and local programs that would be mandated by S. 1630 and H.R. 3030 that were not contained in the President's legislative proposal and, therefore, were not considered in his proposed budget. The implementation of these programs alone could easily cost state and local agencies over $20 million above the President's proposed appropriation. Please bear in mind that this is not an exhaustive list. Again, I note that we support the adoption of these additional measures and believe they are vital to our efforts to improve and maintain our nation's air quality.

First, under both the House and Senate amendments, state and local agencies must establish small business technical assistance programs, which would require them to develop, collect, evaluate and coordinate information on compliance methods and technologies for small businesses, and provide advice on stationary sources. Such a program could cost state and local agencies well over $3 million to implement. Second, it is likely that the law will require an expansive area source monitoring network with which state and local agencies must test for a range of toxic air pollutants. The cost of such a program could exceed $15 million for state and local agencies. Finally, the law could call for additional emission inventory development, which could cost state and local agencies over $2 million more than the inventory program required under the President's proposal

We realize that funding for air pollution control programs is not the sole responsibility of the federal government. In fact, through appropriations and fee programs, state and local governments have contributed substantial funding—nearly two-thirds—for their air pollution control efforts. Nevertheless, in recent years the available funding has been inadequate to accomplish all that must be done. This year, in spite of the proposed increase in appropriations, state and local agencies will be expected to accomplish far more to satisfy the additional requirements of an amended Clean Air Act, without a sufficient increase in financial support. It is, indeed, a difficult task.

In conclusion, the Clean Air Act amendments will provide us with a challenge and opportunity to improve our air quality. However, without sufficient resources, our efforts to carry out the public's wishes will be weakened. Accordingly, state and local air agencies require a significant increase in funds to operate their programs effectively. In recognition of efforts to reduce the federal deficit, however, STAPPA and ALAPCO are resigned to the fact that additional funds may not be forthcoming and that, therefore, the proposed appropriation of $137.7 million for state and local air pollution control agencies Is acceptable.

On behalf of STAPPA and ALAPCO, thank you for this opportunity to testify. I will be happy to answer any questions you have.

STATEMENT OF CHARLES R. READING, CHAIRMAN, EXECUTIVE COMMITTEE, WATER AND WASTEWATER EQUIPMENT MANUFACTURERS ASSOCIATION

Senator **Mikulski**. We'll now go on to Mr. Reading.

Mr. **Reading**. Thank you, and good morning.

I'm Charles Reading, president of Capitals Control Co. and chairman of the Water and Wastewater Equipment Manufacturers Association, more commonly referred to as WEMA. WEMA has been in existence for 82 years, representing the interests of manufacturers that provide technology to the water supply and wastewater treatment industry.

TWO CRITICAL SHORTFALLS IN BUDGET

WEMA has identified two critical shortfalls in the administration's budget proposal for the Environmental Protection Agency in fiscal 1991. Facing an ever-increasing Federal deficit, a unique deal was struck between Congress, the administration, and the States, whereby the State and local governments would assume responsibility for $83.5 billion in wastewater facility construction needs in return for $18 billion in Federal grants and seed money to establish State revolving funds.

These State-administered loan programs will ensure a self-perpetuating fund for meeting the Nation's future water quality needs. Over the past 5 years appropriations for these programs have resulted on a $1.6 billion shortfall. Now, for fiscal 1991, the administration has requested only $1.6 billion, a 33-percent reduction from the authorized level of $2.4 billion.

WEMA strongly urges the subcommittee to appropriate the full $2.4 billion for the State Revolving Fund Program in fiscal 1991, and to increase appropriations during fiscal 1992 through 1994 to ensure that the full authorized level of $18 billion is committed to protect the viability of this ambitious program. In addition,WEMA is gravely concerned with the proposed funding level for State programs to administer the State Drinking Water Act.

Amendments to the law in 1986 call for a 500-percent increase in contaminants to be regulated. According to a recent EPA study, the States will need $180 million for startup costs and $150 million annually to implement and enforce these regulations. The administration, however, has only requested $47 million for public water supply supervision grants in fiscal 1991.

WEMA supports the Association of State Drinking Water Administrators' position to increase this funding to $66 million in fiscal 1991, and an additional increase of $26 million in fiscal 1992. These amounts only represent one-half of the costs that will be borne by the States to administer this ambitious law. Failure to appropriate these funds may force the States to relinquish their responsibilities for the program to the Federal Government and could stifle any progress we hope to achieve in improving our Nation's drinking water supplies.

Thank you very much for this consideration.

Senator **Mikulski**. Thank you. Right on the button. I hope some of those horses in the Preakness are as good as the way you're galloping through, and I appreciate it.

Mr. **Reading**. Thank you for the opportunity.

[The statement follows:]

STATEMENT OF CHARLES R. READING

The Water and Wastewater Equipment Manufacturers Association (WWEMA) is honored to have this opportunity to present its views relative to the fiscal 1991 budget requirements for the U.S. Environmental Protection Agency.

WWEMA has been in existence for eighty-two years representing corporations that manufacture technology sold to the water supply and wastewater treatment industry. Our members serve industrial and municipal customers throughout the United States by providing treatment technology used to achieve compliance with the Nation's Clean Water Act and Safe Drinking Water Act.

WWEMA members share a common goal with the U.S. Environmental Protection Agency in striving to provide a healthy environment through adequate wastewater treatment and disposal practices, and in supporting the public's need for safe drinking water supplies.

Congress committed its support for these goals through reauthorization of the Clean Water Act in 1987 and Safe Drinking Water Act in 1986. We seek your Subcommittee's assistance today in providing EPA and the states with sufficient resource support to properly administer these laws and ensure their attainment.

WWEMA has identified two critical areas that deserve careful consideration by this Subcommittee as it contemplates the appropriating of funds for the EPA in fiscal 1991. These being the transition from direct federal grants to capitalization of state revolving fund (SRF) programs for financing the Nation's wastewater treatment needs, and the resource requirements for the states to adequately administer the Clean Water Act and Safe Drinking Water Act.

WASTEWATER TREATMENT

The 1987 amendments to the Clean Water Act reflected Congress' commitment to protect the quality of the Nation's water resources by creating new programs to control the release of pollutants into waterways. New programs were established to control non-point source pollutants, such as agricultural runoffs; to correct the massive problem of combined sewer overflows which may cause direct dumping of raw sewage into rivers during wet weather conditions; and to eliminate the discharge of toxic substances to the Nation's waters.

At the same time, Congress acknowledged that while much progress had been attained in cleaning up the Nation's water resources from point source pollution (at the end of the pipe), much remained to be done beyond the $77 billion that had been invested to date in the construction of grant-assisted wastewater treatment facilities.

EPA identified in its 1988 Needs Survey a total of 10,835 facilities with documented water quality or public health problems and estimated the need for an additional $83.5 billion of capital investment to address the Nation's wastewater treatment needs in order to achieve compliance with the Clean Water Act. These needs do not even take into account the new programs established by the 1987 amendments to the Act.

Faced with an ever-increasing federal deficit, Congress recognized that it could not continue to support the EPA construction grants program through direct federal grants to meet these enormous needs. In a responsive—and responsible—manner, Congress, the Administration and the States essentially "struck a unique deal" whereby the federal construction grants program would be phased out over a five-year period and be replaced by self-sufficient state revolving fund programs dedicated to financing the Nation's future water quality needs.

To facilitate in the establishment of these state revolving funds, federal moneys were to be provided to the states in the form of capitalization grants requiring a 20 percent state match. The states would loan these funds to communities requiring a payback with interest over a 20-year period, thus ensuring that these programs remain in perpetuity.

The states and local governments agreed to assume $83.5 billion in needs and assume full responsibility for local wastewater treatment needs in return for $18 billion in federal capitalization grants. Unfortunately, the Administration has reneged on its commitment by continuing to request less funding than was agreed to under this unique scenario.

Congress had authorized $9.6 billion between fiscal year 1986 and fiscal year 1990 for the construction grants program and $8.4 billion between fiscal year 1989 and fiscal year 1994 for the capitalization of state revolving funds. Over the past five years, these programs have experienced a $1.6 billion shortfall from what was authorized to what was actually appropriated. For fiscal year 1991, the Administration has only requested $1.6 billion for the state revolving fund program, a 33 percent reduction from the authorized level of $2.4 billion.

Unless Congress takes control of this downward spiral, the Nation will again experience the tragedies of the past whereby the Nation's water resources will be subject to deterioration and America's infrastructure will suffer from greater neglect and disrepair. Most harmed will be the Nation's small communities which have yet to received needed financial assistance to meet their basic water pollution control needs.

WWEMA urges this Subcommittee to appropriate, at minimum, the full $2.4 billion authorized for the state revolving fund program. In addition, WWEMA calls upon this Subcommittee to be prepared to take action in fiscal year 1992 through fiscal year 1994 to fund this program at a level which will ensure that the full $18 billion authorized by the 1987 amendments to the Clean Water Act is committed to capitalize these state revolving funds to meet the enormous water pollution control needs facing our Nation.

STATE RESOURCES

On a related matter, WWEMA would like to alert this Subcommittee of the vital need to support the administrative costs of the states to administer the laws set forth by the Federal government. Through primacy agreements, the states have assumed responsibility to implement and enforce these Federal laws as mandated by Congress.

In the wastewater program, full funding of the state revolving loan program will provide the states with needed financial resources by allowing four percent of all grant awards to be directed toward this purpose.

Of greater concern to WWEMA is the lack of available funds to support the administrative needs of the states to carry out the numerous provisions of the Safe Drinking Water Act. This law calls for an increase from 22 to more than 100 contaminants which will have to be regulated by the states by 1992.

According to a recent EPA study, the states will need $180 million in one time start-up costs between now and 1992 to implement the regulations being developed and promulgated by EPA in response to mandates contained in the Act. After these regulations are adopted, the states will need an additional $150 million annually to properly implement and enforce these regulations. This amount is over and above the resources currently being expended annually by state programs.

To adequately meet increasing responsibilities, WWEMA supports the request of the Association of State Drinking Water Administrators (ASDWA) to increase funding levels for public water supply supervision (PWSS) grants from its current level of $40.45 million in fiscal year 1990 to $93.45 million in fiscal year 1992. This will require an increase of $19.5 million above the Administration's request in fiscal year 1991 for a total of $66.95 million, followed by an increase of $26.5 million in fiscal year 1992.

Although Congress is authorized to fund up to 75 percent of the costs of drinking water programs, these amounts only support one-half of the costs that will be borne by the states to administer this vital law. Failure to provide these resource needs to the states could result in a decision by the states to relinquish their primacy rights, forcing the Federal government to assume full responsibility for administering the law using Federal funds. Not only is this a cost the Federal government cannot afford, but it would likely result in the demise of the Nation's ambitious drinking water program which has just begun to take effect.

While we recognize that your Subcommittee faces a heroic challenge of disbursing limited funds among many credible programs, we sincerely hope that you will give favorable consideration to the needs of the programs addressed in our testimony. These programs represent minimum requirements to protect public health and ensure a stable economy through sound environmental infrastructure initiatives.

Thank you for this opportunity.

STATEMENT OF KNUT RINGEN, DIRECTOR, LABORERS' NATIONAL HEALTH AND SAFETY FUND, LABORERS' INTERNATIONAL UNION OF NORTH AMERICA

Senator **Mikulski**. We'd now like to turn to Dr. Ringen, representing the LIU of North America, who, I know, will be speaking to us on the issue surrounding skilled workers as they deal with the abatement of hazardous materials.

Dr. **Ringen**. That's right.

Senator MIKULSKI. Doctor, we welcome your testimony and the Chair wishes to note that we have with us this morning Senator D'Amato of New York.

Senator D'AMATO. Thank you, Madam Chair.

Madam Chair, I'm wondering if I might be permitted to submit some questions and a statement for the record as I'm not going to be able to stay; I have another hearing.

Senator MIKULSKI. The Senator's questions and statement are, of course always included in the record, and we'll see that they get to the appropriate agencies. We know that there are many appropriations meetings going on now, and also the Senator is involved in his new housing legislations.

Senator D'AMATO. I'm deeply appreciative. Thank you.

[The statement follows:]

STATEMENT OF SENATOR D'AMATO

Over the past several years I have carefully followed the actions of this troubled agency with an increasing sense of frustration that has led me to outspoken criticism. Just recently I held two press conferences to expose the dangers of using "killer pillows"; bean bag cushions intended for use by infants. These innocuous pillows have been responsible for the suffocation deaths of nineteen infants. In addition to alerting the public to this insidious threat, I drew attention to the failure of the Consumer Product Safety Commission to move expeditiously to effectively alert the public so that no more needless deaths occur.

The "killer pillow" case underscores the need to revitalize CPSC so that it can get back to the business of protecting American households from day-to-day hazards posed by consumer products. In the past nine years, this agency has endured cutback after cutback that have left it almost powerless. It is now time to re-examine the proper role of the agency and to correct the errors of the past.

A number of respected organizations have called for restoring the agency's budget to levels that would allow it to take action in a number of badly-needed areas. I support those sentiments because this tiny agency has a giant mission—to protect us from hazards that may occur from an incredible variety of consumer products. However, I must inject a note of realism, and stress that I do not advocate a blank check approach. Simply increasing CPSC's budget will not solve the problem. Unfortunately, the past decade has seen a major erosion of the agency's ability to work. This deterioration has occurred for a number of reasons, many originating within the agency due to deregulatory fervor and mismanagement. While it is refreshing to note that there is a new Chairman at the agency who has called for a new partnership with Congress, I must point out that she has signed on as captain of a ship heavily overburdened with problems of the past. Those problems are now her problems, and the Congress will not sit back idly if the Commission remains lethargic. The honeymoon will not last long.

CPSC has not been reauthorized since 1981. Instead, the agency has been sustained by yearly appropriations. Amending the current Consumer Product Safety Act to correct the many deficiencies that hamper the agency must go along with the effort to restore the budget. While I agree with those who advocate increased resources for CPSC, I believe that we must also seriously start work on a reauthorization bill that will give the agency the tools to do its work effectively and in a timely manner. There are any number of examples of bungling of hazard areas by the agency due to what I call "institutional indifference", and if the new leadership of the agency will not turn this around, then amendment of the Act can.

It is obvious from examining the fiscal year 1991 budget from CPSC that the very agency infrastructure is collapsing. This agency is helpless to protect the public, and I believe it critically needs some modest level of additional funding to keep it alive. However, it has demonstrated that accountability must accompany such additional funding, because it is not clear that the agency is capable of setting its priorities. They have let critical infant safety issues languish while decade-long projects continue to consume scarce resources without any promise of product safety payoff. I would point to the riding lawn mower project as an example of a resource-gobbling dinosaur of a project. This project has consumed several million dollars, and even though it has been designated a "priority project" for several years, there is no indication of progress or promise. At the same time, the agency does not have the funds to collect comprehensive data on the causes of deaths of infants in their cribs. Nor does it have the resources to determine if industries comply with the voluntary standards that the Commission has deferred to. And it does not have the funds to distribute safety information to targeted audiences where it is most effective.

When someone puts their baby to bed, they shouldn't have to stand over the crib all night to protect it from being killed by a pillow or any other product. CPSC is critically needed, but the history of its recent past is dismal, and I too am looking for promise for the future. I commend those organizations and individuals who are calling for revitalizing this important agency because I have had to console the parents of a child needlessly killed by a harmless-looking product and I do not want to have to console someone else.

Dr. RINGEN. Thank you very much, Senator Mikulski, for inviting us here.

I'm Knut Ringen. I'm director of the Laborers' National Health and Safety Fund, which is a joint union and employer initiative of the Laborers' International Union of North America.

This committee, and you in particular, have been very supportive of our concerns and we appreciate that.

There's general agreement that asbestos abatement, hazardous waste cleanup and, most recently, now lead abatement to protect our children from this horrible disease, have become some of the Nation's highest priorities. Our union represents over 500,000 members who have the major responsibility in these areas.

PROTECTION OF WORKERS

This abatement and cleanup is dependent on having well-trained workers, responsible contractors, and vigorous Government enforcement. If workers aren't protected and do not do the work properly, then the community isn't protected either and that's our point.

The training of workers is an area where continued public assistance is needed and we hope you will continue to give us support as you have. We also believe that this training should be done under joint union/employer cooperation in recognition of the extraordinary hazards. Our union has 72 training centers that train over 30,000 workers a year.

We also believe that additional monitoring and research is needed to understand the hazards that are faced in this work and to maintain public confidence in our abatement and cleanup.

MEDICAL MONITORING FOR ASBESTOS WORKERS

If I can take one moment, it's just to express our direct medical monitoring across the country for asbestos workers in the past, and our workers who have been in this trade for more than 20 years, of them 20 percent to 50 percent have clinical evidence of asbestos disease. Had we known what we know today 20 years ago, we would have done more in terms of training and medical monitoring and protected them better. I think it's absolutely essential to do this today.

Our request is summarized at the last page of my testimony and I won't go through the whole thing. There's just one agency I would like to touch on, if I may, and that's the Agency for Toxic Substances and Disease Registry, which is a part of the CDC and is funded under SARA. The President's budget is $44.5 million for this year, and last year the appropriation was $46.5 million. We believe this agency now functions very well and provides a very important independent evaluation of the hazardous waste cleanup in this country. We recommend that its appropriation be increased to $55 million per year next year.

I think my other requests are self-explanatory.

Senator MIKULSKI. Thank you very much. Dr. Ringen. To other members, we are moving the panels expeditiously. Please know that our tempo in no way is meant to minimize the impact of your testimony. It will be read carefully as we go through our rigorous appropriations.

LEAD ABATEMENT

Doctor, to you, I would welcome some additional advice for the committee on the issue of lead abatement. We feel that this is a growing issue, an issue probably of the 1990's. We would like to be ahead of the curve, and as we look out, say, for the safety of children now living in public or Indian-assisted housing, we want to make sure that we're looking out for the workers who are trying to save the children.

Dr. RINGEN. I'm pleased to say that our union is the first to have developed a training program in this area, and it was just certified in the State of Massachusetts and is ready to begin to be implemented nationwide.

We have to—if we're going to stay ahead of the curve on this particular issue, we have to start training workers now.

Senator MIKULSKI. Well, Doctor, we would welcome whatever conceptual and practical framework you have on: No. 1, an abatement strategy—what are the best strategies—and, No. 2, what are the best ways to provide workers a safe atmosphere?

Dr. RINGEN. We have very specific recommendations on those issues to give to your staff.

Senator MIKULSKI. Thank you very much, Doctor. This will be extremely important, because we're going to be pushing this in public housing.

Dr. RINGEN. Well, I think it's an urgent issue as well. Thank you.

Senator MIKULSKI. Thank you. Mr. Reading, and to the others who testified. Again, it is most appreciated.

[The statement follows:]

STATEMENT OF KNUT RINGEN

Chairman Mikulski, thank you for inviting us to testify here today. My name is Dr. Knut Ringen. I am Director of the Laborers' National Health and Safety Fund, a joint initiative of the Laborers' International Union of North America and its signatory contractors.

We believe that the fields of asbestos abatement, hazardous waste cleanup—and now also lead abatement—are of the highest priority to this nation's domestic well-being.

This abatement and cleanup are dependent on having well-trained workers, responsible contractors, and vigorous government monitoring and enforcement. We stress that if the workers do not perform the work properly, then neither they nor the community at large are protected from contamination.

The training of workers is an area where continued public assistance is required if we as a nation are to meet our goal of performing this work as promptly as possible. We further believe that this training is best performed within a structure of union and employer cooperation in recognition of the extraordinary hazards that this type of work presents.

We also believe that additional monitoring and research is needed to understand the hazards that are faced in this work and to maintain public confidence in our abatement and cleanup programs.

THE LABORERS' ROLE AND RESPONSIBILITY

Construction laborers perform a total of 286 skilled tasks as defined by the U.S. Department of Labor. These tasks include demolition, general cleanup and the major tasks involved in asbestos and lead abatement, and hazardous waste cleanup.

The Laborers' International Union of North America represents more than 500,000 members, most of whom are construction laborers. The Laborers' Union is the main organization representing workers who perform asbestos and lead abatement, and hazardous waste cleanup.

Local affiliates of this union operate 72 training facilities which are jointly trusteed by the union and employers under the Taft-Hartley Act. The training facilities have provided asbestos abatement training for the past seven years for approximately 25,000 workers. For the past two years, some funding for asbestos abatement training has been received from the EPA.

The nationally recognized Laborers-AGC training facilities offer the most extensive training program in hazardous waste cleanup. This program is partly funded by a major grant from NIEHS. In the past two and one half years, over 5,000 workers have completed this training program.

In anticipation of the future need for lead abatement workers, the Laborers-AGC has established a program of lead abatement training. This has been pilot-tested and is being made available to our training facilities across the nation.

In 1988, the Laborers' Union established the Laborers' National Health and Safety Fund, in part to provide technical competency in health and safety for our members involved in these very hazardous operations. One of the Fund's aims is to prevent exposures on the job and to provide for medical monitoring to detect any possible adverse effects at the earliest stage.

We have learned through tragic experience what inadequate health protection can do. One-fifth to one-half of our members with at least 20 years of experience in construction have clinical indications of asbestos disease. In most cases, they were doing maintenance or general construction work in buildings where asbestos was being installed. We do not intend to create another generation of asbestos victims.

FUNDING NEEDS

ASBESTOS ABATEMENT

The demand for qualified asbestos abatement workers is outstripping the supply of properly trained workers. This, combined with lax enforcement of laws for both abatement operations and occupational safety and health, have resulted in the proliferation of fly-by-night contractors and much incompetent abatement, leaving the buildings, workers and the community at greater risk than before abatement was begun.

We take pride on our asbestos abatement training programs. Based on our experience, a minimum training program must be 32 hours in duration, including 12 hours devoted to hands-on-training. Many of the government-certified training programs do not meet this standard.

In fiscal year 1989 Congress appropriated $400,000 for asbestos abatement training support and in 1990 $1.5 million. These monies are administered by the EPA and are dedicated to joint union-employer training funds organized under section 302 of the Taft-Hartley Act. We request that this amount be increased to $5.0 million in fiscal year 1991, and dedicated to joint union-employer training funds.

We also request that $700,000 be allocated to establish a study of at least 2,000 workers to assess whether workers trained for 32 hours are suffering adverse health effects. This study should be organized by the National Institute for Occupational Safety and Health, CDC, PHS, and conducted under a cooperative agreement with a joint union-employer health program.

HAZARDOUS WASTE CLEANUP OPERATIONS

We request that Congress appropriate to the National Institute of Environmental Health Sciences $20 million for worker training programs authorized under SARA/CERCLA. This is the same amount appropriated for fiscal year 1990.

We also ask that Congress appropriate to the National Institute of Environmental Health Services the full $35 million authorized for research on hazardous waste in

CERCLA. The amount appropriated for this purpose in fiscal year 1990 was $16.9 million. The increase is needed because as the national effort to abate hazardous waste moves from site evaluation to actual cleanup, we are identifying more and increasingly complex combinations of hazards, many of which are old and possibly decomposed, or even unknown. A great deal of additional research is needed to determine the human health consequences of exposure to these complex combinations.

The Agency for Toxic Substances and Disease Registry (ATSDR) was established to monitor health risks on and surrounding hazardous waste sites, and to recommend ways to protect the public from these sites. We have found the services provided by ATSDR to be vital in a number of areas, including hazard identification, communication of hazards to the general public, professional education, and surveillance. ATSDR is a new agency with a very complex mission, and has been struggling to get established. We are satisfied that it is now finding its way, and is progressing well.

We have proposed the establishment of a long-term prospective medical study of 10,000 hazardous waste cleanup workers, to be conducted in cooperation with ATSDR to determine whether our members suffer adverse health effects from possible exposures on the job. This study cannot be undertaken without ATSDR.

When Congress established ATSDR, it wanted an independent agency to serve as a check and balance to the operational agencies in hazardous waste cleanup. To be independent and effective, the agency requires sufficient funding. In fiscal year 1990, Congress appropriated $46.5 million for ATSDR. The Administration's budget has proposed $44.5 million for fiscal year 1991, which is not sufficient to fund current programs. We request an appropriation of $55 million for fiscal year 1991 for ATSDR.

LEAD ABATEMENT

In the past year, the alarming impact of exposure to household and community lead on the health of our nation's children has become clear, and there are many proposed solutions in the works. To address this tragic problem, we need to develop a trained and qualified work force immediately, since there is a huge training void to fill before abatement programs can begin. Therefore, funding is requested in the amount of $5 million to establish training programs with a target of training 10,000 workers. This funding should be dedicated to joint union-employer training facilities. We believe this program should be managed by the National Institute of Environmental Health Sciences.

Additionally, we believe that more health effects research is needed, with emphasis on the efficacy of abatement methods and operations. We therefore request $10 million be appropriated for NIEHS, and that $5 million of this be dedicated for extramural research.

VA, HUD AND INDEPENDENT AGENCIES REQUESTED APPROPRIATIONS, 1991

[In millions of dollars]

Issue/Agency	Appropriations	
	1990	1991
Training of asbestos workers by joint union-employer training funds (EPA)	1.5	5.0
Medical study of asbestos abatement workers with joint union-employer health fund; two FTE's (NIOSH)		0.7
Hazardous waste cleanup workers training (NIEHS)	20.0	20.0
Hazardous waste health research (NIEHS)	16.9	35.0
Hazardous waste site and community monitoring (ATSDR)	46.5	55.0
Lead abatement worker training for joint union employer training funds (NIEHS)		5.0
Lead and human health research, including abatement (NIEHS):		
Intramural		5.0
Extramural		5.0

Senator **Mikulski**. I'm going to now ask that Senator Alphonse D'Amato chair the next panel while I go over to the Federal highway hearing and try to make sure that the tragedy in Maryland doesn't happen anyplace else in the Nation. I'll be back.

Senator D'AMATO [presiding]. Next we'll hear from Dr. Phil Bromberg of the American Lung Association; Myra Cypser of the National Federation of Federal Employees; Rebecca Hughes, the Association of State Floodplain Managers; Jack Moskowitz of the United Way of America; and Gary Briese of the International Association of Fire Chiefs.

Dr. Bromberg?

STATEMENT OF PHILIP BROMBERG, AMERICAN LUNG ASSOCIATION AND AMERICAN THORACIC SOCIETY

Dr. BROMBERG. Good morning, Senator.

I'm Dr. Philip Bromberg. I'm the director of the Center for Environmental Medicine at the School of Medicine, University of North Carolina in Chapel Hill. I'm here to represent the American Lung Association which, of course, is particularly concerned with the air portion of the EPA budget. We are, to echo Mr. Reilly's remarks, on the one hand, very concerned about the magnitude of the problem of air pollution and of the health costs associated with it. We have submitted several studies of the economics of this problem to the Congress in the past year or two.

We are pleased that, after many years of neglect, that the administration has seen fit to increase the request for the total air program by $100 million, approximately, to a level of $390 million. This does reflect the tremendous needs of the program and new responsibilities.

HEALTH RESEARCH NEGLECTED

What we're not pleased with is the fact that health effects research has been reduced from its current appropriated level of $18 million to $15 million, instead of what we think would be a reasonable increase of 5 percent, to deal with inflation, to $19 million.

We find echoes of this apparent neglect of health research in the budget recommendation for the National Institute of Environmental Health Sciences where, again, what we feel is a very important university-based research and education program has been reduced by $5 million from its present level of $17 million.

We believe that this reenforces a pattern of neglect in health effects research budget and underscores the critical need for the subcommittee to increase EPA's budget in this area consistent with the American Lung Association recommendation.

Thank you.

Senator D'AMATO. Doctor, thank you. Certainly we're going to note your observation. It's something in which I know that the Senator shares a very real concern.

[The statement follows:]

STATEMENT OF PHILIP A. BROMBERG, M.D.

Mr. Chairman and Members of the Subcommittee, I am Dr. Philip Bromberg, Director of the Center for Environmental Medicine at the School of Medicine at the University of North Carolina. On behalf of the American Lung Association and its medical section, the American Thoracic Society, I appreciate this opportunity to comment on the proposed fiscal year 1991 appropriation for the Environmental Protection Agency. I will focus on the Agency's Air Program and its Research and Development component. I also will discuss the fiscal 1991 appropriation for the Veterans Administration's lung disease research activities, which make a vital contribution to the health and well being of our nation's veterans.

The Environmental Protection Agency

This year, the American Lung Association is supporting President Bush's recommended 35 percent increase in the EPA Air Program budget over the current services level. ALA commends the Administration for its recognition of this critical program activity and its need for adequate resources. The Administration has requested $390 million for the Air Program and we urge the subcommittee to resist any attempts to provide less than the president has proposed.

The protracted problem of air pollution continues to pose a significant public health threat to millions of Americans. An estimated 146 million Americans -- approximately 60.5 percent of the resident U.S. population -- live in communities that failed to attain National Ambient Air Quality Standards (NAAQS) in 1988.

Last year, I shared with the Subcommittee an ALA study of the 487 communities that remain in nonattainment. The study, "Breath in Danger," based on data from the Environmental Protection Agency, estimated the size of specific groups of people at particular risk of adverse health effects due to air pollution. The study noted that the elderly, children and adults with asthma, people suffering from chronic obstructive pulmonary disease (COPD), and children under the age of 13 are particularly vulnerable to the health effects of air pollution.

The EPA's Air Program budget is especially critical if our nation is to seriously address the air pollution public health problems that contribute to such health costs. This budget must be protected from any severe cutbacks. The ALA recommendations for the fiscal year 1991 EPA Air Program and selected components within the program are presented in the following table:

ALA Recommendations for the FY 1991
EPA Air Program
(in millions of dollars)

	Bush Recommendation	Current Estimate	ALA Recommendation
Air Program	$390.0	$298.0	$390.0
Health Effects R&D	15.0	16.4	19.0
Air Program (total) R&D	95.0	78.0	95.0
Air Quality & Stationary Source Planning & Studies (Abatement, Control & Compliance)	31.2	21.7	31.2

Health Effects Research and Development

Given our earlier commendation to the Administration for its recognition of the need to adequately support the Air Program, it is astonishing and short-sighted that the president is requesting a 10 percent decrease in the budget for Health Effects Research and Development. This proposed decrease follows a number of years of neglect by the previous administration, and must not be allowed to stand. For many years, we have studied the impact of air pollutants on human health and much work remains ahead of us. Given the continued vulnerability of the elderly, pregnant women, people with lung and heart disease, and the nation's children, among others, to the harmful effects of "criteria" air pollutants, we strongly recommend a 15 percent increase in the fiscal 1991 Health Effects Research and Development budget over the current services level. A 15 percent increase translates into a $2.6 million increase for FY 1991.

I urge the subcommittee to examine closely another ALA document, also released in January of this year. Entitled "The Health Costs of Air Pollution," the study was prepared for the ALA by environmental consultant James S. Cannon. The report is the third in a series of ALA analyses to explore the complex issue of identifying the economic costs of the health-related effects of exposure to outdoor air pollution. The study uses EPA data and other sources to look at both illness and premature death linked to exposure to outdoor air pollutants and examines the estimated costs.

I would like to call the subcommittee's attention to another matter that is critical to the discussion of funding for health effects research. The Bush Administration has recommended a $5 million reduction in the budget for the university-based research and education program at the National Institute of Environmental Health Sciences (NIEHS). This vital program was established as part of the Superfund Amendments and Reauthorization Act of 1986. The president has requested $11.9 million for the program. This request does not reflect the essential nature of this multi-project interdisciplinary program, which facilitates the joint efforts of scientists in various fields as they study environmental hazards and their impact on human health. However, it does reflect and reinforce a longstanding pattern of neglect and reduction in the health effects research budget and underscores the critical need for the subcommittee to increase the EPA's budget in this area consistent with the ALA/ATS recommendation.

Air Program Research and Development Budget

The ALA/ATS enthusiastically supports the Administration's proposed 22 percent increase in the Air Program's total Research and Development budget. The request would provide approximately $95 million for fiscal year 1991. As the subcommittee knows, the research program provides the research and technical support necessary to enable the EPA to carry out its regulatory and information transfer responsibilities under the Clean Air Act. Such initiatives include the provision of scientific data necessary to determine the effects of stratospheric ozone depletion and develop control strategies; the provision of scientific data necessary to determine sources, exposures, health effects and control strategies associated with indoor pollutants; the provision of scientific support to develop regulations for hazardous air pollutants (HAPs); and, the provision of scientific data necessary to determine the effects of global warming and develop control strategies. The president's request provides for increases in funding for all of these laudable objectives. However, as we have noted, the budget for research on the human health effects of air pollution has been slighted by 10 percent and we would urge the subcommittee to recognize this discrepancy and provide appropriate increases that are in line with other initiatives under the Air Program Research and Development budget. For example, there is a critical need to increase the level of funding for research on the chronic health effects of ground level ozone.

The Administration also seeks, within the Research and Development budget, an increase of 44 percent in the Air Quality and Stationary Source Planning and Standards program. ALA supports this increase, which amounts to $31.2 million, and urges the subcommittee to support it as well. The increase in the Air Quality and Stationary Source Planning and Standards program's budget is necessary to support new activities anticipated in the reauthorization of the Clean Air Act, including activity to attain the health-based National Ambient Air Quality Standards.

Mobile and Stationary Source Enforcement

The ALA/ATS is pleased that the president's recommendations for both Mobile and Stationary Source Enforcement provide for a 150 percent and 63 percent increase, respectively, over the current estimate levels. The Administration's proposed level of funding would provide $5 million for Mobile Source Enforcement and $6.5 million for Stationary Source Enforcement.

I will conclude this EPA-related portion of my testimony by reminding the subcommittee that the prevailing nationwide nonattainment of air quality standards remains a significant public health threat to millions of your constituents. The president's budget offers hope for addressing this problem. In many areas, encouraging increases are recommended by the Administration. There are a few areas, however, where we believe that more realistic funding levels are sorely needed. I have singled out these areas for you and urge you to accept our recommendations. As always, we stand ready to offer our assistance as the subcommittee continues it deliberations.

The Veterans Administration

Mr. Chairman, while the Administrations budget proposal for the EPA for fiscal 1991 is very positive, it does not appear that the Administration's commitment to the good health of our nation's citizens extends to the Medical Research program administered by the Department of Veterans Affairs through its VA health care system.

The situation prompts a question -- Why does the federal government have such a great commitment to the active Armed Forces of our country, through funding for defense weapons development systems, and such an embarrassingly weak commitment to those who have served in the past?

Funding for the VA Medical Research program is quite possibly among the most productive and well spent of any federal resources. While the VA Medical Research program is modest by most standards, it plays an extremely valuable role in the nation's overall medical research effort:

- o It provides a scientific environment for top researchers who thrive in a patient-care setting. Without this important component, most scientists would leave the VA system for other, more academically sophisticated settings.
- o It serves as a cutting edge for the clinical research arena where promising disease treatments are carefully tested by clinicians and scientists who wish to improve the quality of care to veterans and others who would benefit from medical advances.
- o It allows scientists the opportunity to work with a patient population that shares a number of important epidemiologic similarities. These similarities mean a great deal to a scientist who is trying to learn about a given disease.
- o It serves as a valuable proving ground for young, talented individuals who wish to devote their careers to the biomedical sciences. The VA Career Development program provides grants to support the training of future investigators. Today we face a crisis situation as a decreasing number of bright, young people choose research careers. We need every possible resource available to encourage more individuals to become researchers.
- o And, it focuses on specific disorders that impact all Americans. For example, even though veterans are disproportionately affected by lung disease, the pulmonary research conducted by VA scientists provides benefits to all persons afflicted with lung disease.

Mr. Chairman, the president's fiscal 1991 budget proposal for the VA Medical Research Program is $198.5 million. Incredibly, this is nearly $15 million **LESS** than the current level of funding. It does not make good sense to reduce the commitment to medical research now, or in the future. With the myriad sophisticated technologies being development and applied today, this country is on the verge of making great strides in understanding, treating and preventing a vast range of medical disorders, including those affecting our veterans. The VA Medical Research program must be strong enough to foster this progress. To do less will be selling short those men and women who have served this country and deserve the very best – not second best.

Thank you.

STATEMENT OF MYRA CYPSER, NATIONAL FEDERATION OF FEDERAL EMPLOYEES LOCAL 2050

INDOOR AIR POLLUTION AT EPA HEADQUARTERS

Senator D'AMATO. Is it Myra Cypser?

Ms. CYPSER. My name is Myra Cypser and I'm testifying for NFFE Local 2050, one of the unions at the EPA headquarters.

We want to thank Senator Mikulski for her concern about the indoor air pollution problems in the EPA headquarters buildings.

The main comment I have about the budget is that it is impossible to tell how much money will be spent on EPA's indoor air pollution problems because the budget has unrelated expenses mixed in together. It's very important to have accountability in the budget process.

We hope this committee will ask the administration exactly how much money they will spend and what they will do to improve EPA's indoor air. The agency's health survey showed that more than 40 percent of the headquarters' employees have sick building health symptoms.

I'd like everybody here to think about employees suffering from fatigue or headaches, as they try to write regulations and do their jobs, and think about the loss of productivity, the waste of tax dollars, and EPA employees not being able to do their jobs effectively.

The administration has still not adequately addressed the indoor air pollution problem and, considering their opposition to the indoor air bills in Congress, it doesn't seem very likely that we're going to get them to act aggressively on this issue.

If the administration can't take care of a relatively simple environmental problem in their own headquarters, how will they be able to handle the really big problems like global warming? EPA employees are relying on Congress to protect the work environment at EPA.

Senator D'AMATO. I want to thank you for your statement and, again, I know that is a very real concern, not only with the chairman but with other members of the subcommittee, and we certainly will pursue that.

[The statement follows:]

STATEMENT OF MYRA CYPSER

Madam Chair and members of the Committee: Thank you for the opportunity to comment on EPA's budget request for 1991. My name is Myra Cypser and I will be testifying on behalf of NFFE Local 2050, the Union which represents the scientists, engineers, attorneys and other professionals at EPA Headquarters.

First of all, let me thank you, Senator Mikulski, for the concern you've shown about the indoor air problems in the EPA Headquarters' buildings. Your letters and public statements have had a great impact on the Administration.

The main comment I have about the budget is that it doesn't tell us how much money will be spent to correct the indoor air problems in the EPA Headquarters' buildings. The budget has unrelated expenditures mixed in together; for example, health and safety expenses are mixed in with expenditures for Regional Office moves. It is impossible to tell how much will be spent on each. Also, the budget doesn't tell us what specific tasks or projects will be completed to improve EPA's indoor air.

Accountability through the budget process is critical if we are to resolve indoor air issues. We hope this Committee will ask the Administration for specific figures on how much they will spend to improve the indoor air quality in EPA Headquarters' buildings. We would like to see expenses itemized line-by-line, with clear desciptions of various projects. The proposed 1991 budget, with everything mixed in together, is clearly unacceptable. We hope the Committee will ask for detailed information on past expenditures also.

As you know, EPA conducted an employee survey last year to determine the level of indoor air related health complaints. The Union is very concerned about the results of this survey. It showed that more than 40% of the EPA employees in Headquarters' buildings had "sick building" health symptoms, including headache; runny or stuffy nose; sneezing; dry, itching, or tearing eyes; sore, strained eyes; unusual fatigue and/or sleepiness. Unfortunately, the Administration has still not taken adequate measures to correct this problem. The overwhelming magnitude of the problem and the urgent need for immediate action are not reflected in the budget.

Consider the cost of this illness and the impact on productivity. Think about employees suffering from sleepiness or headaches as they try to write regulations or do research to protect the environment. Think about employees taking walks outside during the day to "get some fresh air." We are not only talking about tax dollars going to waste here, we are talking about the world's most important environmental organization not being able to function effectively.

EPA employees are charged with protecting the environment. But who is going to protect the work environment at EPA? The Administration has testified before Congress, denying the need for the indoor air legislation sponsored by Congressman Joe Kennedy and the companion bill in the Senate. Given the Administration's attitude toward indoor air legislation, we have to assume that they will not act aggressively to solve our indoor air problems and that the EPA employees will have to rely directly on Congress to protect employee interests.

The Administration has wasted tax dollars on poorly designed studies of the ventilation systems. None of the studies we have seen so far have shown if the ventilation systems meet the national standard for outside makeup air, the standard set by the American Society of Heating, Refrigerating, and Air-conditioning Engineers (ASHRAE). This standard is 20 cubic feet per minute per person of outside makeup air.

The Administration's current ventilation study at the Waterside Mall complex, the main Headquarters' building, is being conducted by the building owner's contractor. Obviously, there appears to be a conflict of interest. We have pleaded for five months for another study, a neutral investigation of the adequacy of the ventilation systems, not only for Waterside Mall, but for all the Headquarters' buildings. The Administration has not given us this investigation.

The Administration has written to you about "improvements" made to the ventilation systems. They have made improvements in 10 air handling systems. But what about all the other systems? There are more than 100 air handling systems in the Waterside Mall complex and we see no evidence that there has been a methodical evaluation of the adequacy of these other systems. Also, what about the ventilation systems in the other buildings?

While they claim that "calculations" show compliance with the ASHRAE standard for air flow in the 10 "improved" air handling systems, they have not shown these calculations to the Union. We would like to see evidence of compliance. We hope they can demonstrate compliance with the ASHRAE standard because if they can't, these "improvements" would be a waste of tax dollars.

The ASHRAE standard is cited in our 1987 contract with the Agency. Employees have been waiting for many years for some action on this air flow issue. Why haven't they set aside money to thoroughly investigate the ventilation systems and provide the EPA employees with at least this minimum amount of air flow? Do they expect us to hold our breath until the "new building" is ready?

We understand that the new building will not be ready for at least another five years. This is too long to wait. The Union position is that we are faced with a health crisis and if it is not possible to make significant program changes and building repairs almost immediately, then all Headquarters' employees should be moved to a temporary location on an emergency basis. GSA should act quickly to find new office space.

Also, many employees believe that it is a waste of tax dollars for the government to be attempting to fix up privately owned buildings. Why should the Administration be making "gifts" to private industry? When does it become more cost effective to move out?

Employees have doubts about the validity of Agency indoor air pollution monitoring studies. When pollution monitoring is done, the air exchange rate should be measured to determine if there is an increase in the amount of outside makeup air being introduced. During the course of one study, the air exchange rate increased by at least a factor of ten, indicating a major change in the operation of the ventilation system. (This could have been done intentionally to lower pollution levels as they were being monitored.) Employees have reported that the air seems cooler/"fresher" during monitoring. For other studies, there were insufficient measurements to show if the amount of outside makeup air increased. Because these studies were not properly designed, tax dollars were wasted.

The removal of the "toxic carpet" is an issue of special concern to the Union and to the employees whose lives were radically changed by this carpet which was installed in 1987 and 1988. The Agency installed this carpet during a six month period. They finally agreed to remove the carpet in September 1989; however, in the following six months, they only removed 10% of it. At this rate, it will take years to remove all of it. We would like to see specific provisions in the 1991 budget committing the Agency to remove the remaining carpet in a timely manner.

To give credit where credit is due .... the Agency has controlled smoking, minimized the use of toxic airborne pesticides, installed exhaust ventilation systems in some copy machine centers, and modified some exhaust vents that impacted air intakes. They avoid painting during working hours and have taken steps to begin cleaning the ventilation ductwork at Waterside Mall. They regularly monitor carbon dioxide levels.

However, significant progress still has to be made in order to establish a minimal indoor air program that will give employees a safe and healthful work environment. We want the Agency to:

(1) fund an impartial, methodical investigation of all the ventilation systems, and set a firm timetable for making actual physical changes to the ventilation systems to meet the ASHRAE standard for air flow;

(2) control pollution sources, for example, remove all of the "toxic carpet," vent the remaining copy machine centers and restrict the use of small copiers as necessary, clean the ventilation ductwork, and screen materials (such as cleansers) by conducting hazard assessments before they are used in the buildings;

(3) plan a follow-up indoor air health survey to determine if illness levels have decreased, and monitor employee health on a routine basis;

(4) identify all the employees who need alternative worksites because their health is affected by indoor air and get these people out of the buildings; and

(5) acquire technical expertise to design alternative workspace that is suitable for "affected" employees.

We want a response from the EPA Administration on whether they intend to give employees this minimal indoor air program or if their response to the Union is the same as their response to Congress on the indoor air legislation, that it's just not necessary.

We think that EPA should be a model for the nation on how to solve environmental problems in a speedy, reasonable and cost effective manner. So far, the Agency charged with conducting a national indoor air program and protecting the health of a nation has not been willing and/or able to protect the work environment of its own employees. We've had four years of stonewalling on this issue from the Administration. We need real progress now.

The Union appeals to you, Senator Mikulski, please don't forget the EPA employees, please continue your careful oversight of this important environmental issue.

Documents available from the union upon request: (a) "Exhibit ES-5," from Volume I of the EPA employee indoor air health survey. (b) "EPA's Indoor Air Story; A Chronology Of Events," April 10, 1990, by Myra Cypser. (c) Memo: From Sal Biscardi, NFFE Local 2050 to Myra Cypser, NFFE Local 2050, on appropriations. (d) Anonymous statements by 33 EPA employees on personal health effects from EPA's indoor air pollution.

FEDERAL EMERGENCY MANAGEMENT AGENCY

STATEMENT OF REBECCA HUGHES, LEGISLATIVE OFFICER, ASSOCIATION OF STATE FLOODPLAIN MANAGERS

Senator D'AMATO. Rebecca Hughes, the Association of State Floodplain Managers?

Ms. HUGHES. Good morning, Senator.

I am Rebecca Hughes. I am chief of the Floodplain Management Program for the State of Maryland, and I'm here today on behalf of the Association of State Floodplain Managers, the only national association of officials responsible for managing flood-prone areas and for identifying mitigation opportunities after floods occur in order to reduce susceptibility to future events.

MITIGATION

Last year we talked before this subcommittee and others about mitigation. It's a concept whose time has come. We continue to emphasize that only through a positive approach of helping owners of repetitively and severely damaged structures will we begin to see a significant decrease in flood-related costs.

In terms of the fiscal year 1991 budget for FEMA and the Federal Insurance Administration, we emphasize the importance of continuing to improve assistance to communities and efforts to monitor and evaluate community compliance with the floodplain requirements. Most of us really cannot understand or appreciate the difficulty that a small town may have with floodplain management. They're under a great deal of pressure in many cases.

EVALUATE COMMUNITY PERFORMANCE

The only effective way to determine if communities are holding up their end of the flood insurance and disaster assistance agreement is through evaluation. We have three small requests for increases in FEMA's budget. One, we'd like to see an additional $1 million in funding passed through to States to help them evaluate community performance, in particular to help with the community rating system. Currently, that would work out to be about $30,000 per participating State.

The other way to help communities is to expand FIA capabilities. There are over 18,000 communities participating in flood insurance programs, ranging from the largest city down to the smallest town. Under an assistance program and cooperative efforts with other agencies, only 2,200 of these get a visit each year. This means the average community will go 7 to 8 years without a face-to-face visit. Given turnover in local staff, and the difficulties they have, that's too long.

So we urge your positive consideration of $1.5 million additional in funding for FIA and 25 full-time positions. We see them best being utilized in the field where the community one-on-one work is really necessary.

Funding allocation includes mapping of coastal erosion rates and zones. A lot of information is already available. We'd like to see an increase up to $5 million in order to rapidly get that information out to the communities. We support the 1362 program, which does have additional funding for this year. Given Hugo, we still expect applications to come in from that, from flooding down in Alabama, and certainly what we're experiencing in the South right now, we just hope that the $4.7 million will be sufficient.

We'd like to see a change in mitigation and we're working with the authorizing committee on both House and Senate sides to get a proactive approach. We know many structures are sitting ducks, and they're public safety hazards, significant damage threats, and we'd like to see an opportunity to move them out, create open space. We'll be working on that in the future.

Thank you.

Senator D'AMATO. Well, thank you, Rebecca. Certainly, as you make reference to what's taking place in the South right now and the Texas/Arkansas area, the floodplain management, I think, should take on increased import when people see just how devastating these situations can be and have been.

[The statement follows:]

STATEMENT OF REBECCA HUGHES

The Association of State Floodplain Managers is the only national organization of state and local officials responsible for managing hazardous flood-prone areas. We represent agencies and individuals who implement the floodplain management aspects of the National Flood Insurance Program (NFIP). Our members are also active in flood hazard mitigation and other activities to reduce and prevent flood damage.

The National Flood Insurance Program has evolved significantly since its inception. The most promising new initiative is the Community Rating System (CRS). The CRS will encourage innovative state and local programs that exceed minimum standards. We look forward to continuing our role working with the Federal Emergency Management Agency (FEMA) to develop improvements that will reduce flood losses and costs to the Nation.

The Association requests that priority attention be directed to the following aspects of the fiscal year 1991 budget for the Federal Emergency Management Agency and the Federal Insurance Administration (FIA):

FIA's flood hazard reduction programs are inadequately funded to meet the rising need. Its Community Assistance Program requires an additional $1 million to appropriately support cooperative efforts with states.

An additional $1.5 million to fund twenty-five staff positions for FIA headquarters and regional offices is essential. These people are required to adequately support the need and demand for flood loss reduction activities, including monitoring of community performance and compliance with the NFIP requirements, initiation of the Community Rating System, retrofit-floodproofing initiatives, and coastal erosion considerations.

An additional $3 million should be added to expedite preparation of coastal erosion rate mapping.

Inclusion of the proposed $4.72 million under Section 1362—Acquisition of Flood Damaged Buildings is critical for the continuation of this effort.

Our concerns regarding the status of floodplain management and the National Flood Insurance Program can be summarized under three major categories:

NATION IS UNDERINSURED AGAINST FLOOD DAMAGE

The total number of flood insurance policies has only recently begun to show a slight increase after being essentially static since 1980. Only 14 to 15 percent of an estimated 9 to 11 million structures in identified flood hazard areas have insurance. One cause for this severe underinsurance situation is inadequate implementation of the mandatory purchase and retention of flood insurance requirements by lenders. Further, policy holders find it too easy to cancel policies despite requirements to maintain them. Also contributing to the problem is the discrepancy between flood insurance rates which are generally considered high, and the average floodplain occupant's perception of the risk of flooding.

MITIGATION INITIATIVES WILL REDUCE DAMAGE TO OLDER BUILDINGS

Flooding results in a full range of damage. Major floods can cause virtual destruction of buildings. Less intense or less forceful flood events may not render structures uninhabitable, but are the cause of minor and often repeat damage. The cycle of build-damage-rebuild-damage again must be broken in order to significantly reduce the Nation's flood damage and costs. Amendments to the National Flood Insurance Act of 1968 will soon be considered. Among the most important changes to be addressed will be mitigation activities designed to accomplish this goal.

EFFORTS TO MINIMIZE FUTURE FLOOD LOSSES MUST BE STRENGTHENED

Prevention of future flood losses and damage is the primary objective of floodplain management and land use regulatory programs at state and local levels. Since the initiation of the NFIP, the Federal Insurance Administration has steadily and admirably worked to provide maps and regulations for special flood hazard areas. These tools are the foundation of basic efforts to minimize the Nation's susceptibility to flooding. It is crucial that these maps be properly updated, revised and maintained.

The dollar figures that appear in the federal budget are a small portion of the total costs of floods. There are many expenditures related to flooding in addition to the costs incurred by the Federal Emergency Management Agency for disaster assistance and flood insurance claims. State and local governments bear much of the cost of regulating floodplains, preparing floodplain studies and maps, fighting floods, and constructing flood control projects.

When the President declares a major disaster and the federal expenditures are announced to the public, few people know or remember that states pick up 25 percent of disaster assistance costs. More significantly, many floods each year are deemed manageable without federal assistance. Recovery from these events is fully paid for by citizens, states, and local governments. Individual businesses and homeowners pay dearly for property damage, lost business productivity, and suffering.

In an average year, floods in the United States kill over 150 people and cause more than $5 billion in damage to property. These numbers are likely to increase as pressures increase for more floodplain development. The Association of State Floodplain Managers wants to stop the increases in flood damage and the corresponding increases in government expenditures. We want to reduce the disruption, damage, and emotional distress caused by flooding.

Our state and local members work every day to manage new construction in floodplains. We also advise property owners on methods to reduce damage to development that pre-dates the establishment of these management practices. FEMA's flood insurance and hazard mitigation programs help in these efforts. However, only through close cooperation with state and local governments can these federal initiatives be effective.

RECOMMENDATIONS

The Association of State Floodplain Managers has the following recommendations related to fiscal year 1991 Appropriations for the Federal Emergency Management Agency:

Assisting and monitoring local communities.—One of FEMA's most successful partnership programs will soon enter its fifth year: the Community Assistance Program (CAP). FIA's meager headquarters and regional staffs are supplemented through cooperative agreements with most states to provide assistance to communities. Monitoring community performance and compliance is crucial to successful floodplain management. The Community Rating System (CRS) a new FEMA/FIA initiative that the Association strongly supports, will begin this year. It will encourage proactive local floodplain management efforts that exceed the federal minimum standards. Reduced flood insurance premiums will be available to property owners in participating communities. The cost savings in future damage avoided are expected to be substantial. An increase of $1 million above the proposed budget request for the Community Assistance Program will assure needed technical assistance to communities to meet the Community Rating System and other flood loss reduction objectives.

Flood loss reduction staff requirements.—FIA's flood loss reduction activities have been funded at a static level of about $4 million since 1983. Staff in these sections are responsible for a variety of functions, but none more important than community compliance. Section 1316 of the NFIP establishes that flood insurance can only be offered in jurisdictions that satisfactorily implement the requirements. Only through diligent and routine evaluations can performance be adequately determined. Further, it is clear that regular assistance contact with community officials fosters cooperation and program improvements. The Association strongly urges the addition of $1.5 million to fund the creation of an additional 20 positions for the regions, and 5 positions for headquarters.

Coastal erosion.—The "Jones/Upton" Amendment of 1987 (Section 1306) provides for insurance payments for relocation or demolition of structures that are subject to imminent collapse due to erosion. Professional floodplain and coastal managers recognize that community-level erosion zone management will be a crucial element in avoiding future hazardous situations and costs. As with floodplains, communities will rely upon maps with designated erosion rate zones. Along much of the Nation's coastlines, data are available for actively eroding areas. For fiscal year 1991, only $2 million is allocated to begin to collect, review and prepare these data into usable management tools. A minimum of $5 million per year for the next 5 to 6 years is needed for this effort and for the development of erosion rate data in areas where they are currently lacking, and to update data and maps after storms which induce erosion.

Section 1362—Acquisition of flood-damaged buildings.—The Section 1362 program is used to solve a relatively small number of significant and severe problems by providing funds to purchase heavily damaged structures. Draws on these funds are a function of the occurrence of flood events. Several 1989 floods and hurricanes and recent disasters in the South are likely to produce a large number of candidates. We support the President's fiscal year 1991 budget which contains $4.72 million for Section 1362. This will hopefully meet the need. Many buildings can easily be identified as suitable 1362 purchases due to their location within highly hazardous floodplains, usually referred to as floodways. A new approach is needed to move these homes before damage and suffering occur.

Mapping—The management tool.—The foundation of the flood insurance and land use/floodplain management programs is the Flood Insurance Rate Map (FIRM). Floodplain mapping has nearly been completed by FEMA for almost 18,000 communities. This is far from the end of the mapping effort. Many communities need map revisions and map updates. In particular, maps that are more than five years old are poor management tools in areas of rapid growth. Remapping must keep pace with technology and development in order for the NFIP to effectively continue to reduce flood damage. In the coming years, sufficient funds will be required to adequately identify remapping needs, to provide the updated studies and maps, and to rapidly convert to an digitized Geographic Information System to improve the quality, distribution, and usability of the map products.

Mandatory purchase and policy retention.—The Nation's underinsurance situation is perpetuated by uneven implementation of the requirements to get and keep flood insurance on structures in designated flood hazard areas. These requirements are the responsibility of federally-regulated and insured lenders. It is clear that lenders must properly require the purchase and retention of flood insurance. One result of proper and thorough implementation will be growth of the policy base and increases in revenues to the National Flood Insurance Fund. More insured buildings will reduce the likelihood of draws on the Federal Treasury in the event of major flood disasters. Statutory amendments designed to improve lender performance are among revisions to the NFIP that are currently under consideration.

Mitigation of repetitive losses.—One of the most perplexing problems in floodplain management is the build-damage-rebuild-damage again cycle, frequently referred to as the repetitive loss situation. A relatively small number of structures represent a large number of repeat claims against the National Flood Insurance Fund. New initiatives are needed to mitigate these losses. This is truly the classic situation of spending now to effect significant savings later. Statutory initiatives to create a new mitigation program are being considered. Crucial to its success is establishment of a dedicated Mitigation Fund.

Flood insurance rates.—The question of rate increases is often raised when the fiscal integrity of the National Flood Insurance Fund is discussed. It is inappropriate and shortsighted to react to rising flood damage and costs simply by increasing insurance rates, adding surcharges, decreasing coverage, or increasing deductibles. The net effect of those actions is to penalize people who are trying to provide themselves with some financial protection. It does little to affect massive public and private costs resulting from the large number of flooded buildings that are uninsured. Efforts to broaden the policy base and to decrease risks to older buildings must be strengthened. Only in this way will we truly reduce the impacts of floods instead of focusing on affecting the fiscal balance in the National Flood Insurance Fund.

Successful flood damage reduction in the United States requires consistent and coordinated efforts from all levels of government as well as the private sector. The

Association of State Floodplain Managers believes that FEMA and FIA have accomplished a great deal by pursuing these partnerships. The job is far from complete. We pledge our support to the continued pursuit of flood loss prevention and mitigation programs.

STATEMENT OF JACK MOSKOWITZ, VICE PRESIDENT, FEDERAL GOVERNMENT RELATIONS, UNITED WAY OF AMERICA

M'KINNEY HOMELESS ASSISTANCE PROGRAM

Senator D'AMATO. Jack Moskowitz, United Way?

Mr. MOSKOWITZ. Thank you, Senator D'Amato.

I'm Jack Moskowitz, vice president for Federal Government relations, United Way of America.

United Way of America supports full funding of the McKinney Homeless Assistance Program. We're now urging Congress to reauthorize the programs at least to the levels in H.R. 3789. I'm here to report to you on the United Way of America's experience as Administrator of the McKinney Emergency Food and Shelter Program.

In fiscal year 1990 the program was funded at $130.1 million. The proposed $140.7 million in H.R. 3789 is the bare minimum necessary to maintain services already being delivered. More funding is necessary to meet the growing need. I understand the housing subcommittee in the House has upped that in their markup to $150 million and we hope that this amount is approved and that the Senate, and you, Senator D'Amato, in your other role will approve that amount when you reauthorize the program.

Two years ago, the Emergency Food and Shelter National Board did a survey of the agencies it funds and respondents said that the program would need to triple in size to serve the clients they were currently serving. Maryland's experience—and I brought Maryland; I could bring New York that would be much similar—demonstrates the need for increased funding.

INCREASE IN TURNAWAYS

The Maryland State Department of Human Resources did a study, and I just want to give you two results of that study, that shows the need for increased funding; the demand is just ever-increasing out there. The occasions of turnaways increased 27 percent in this period of the study, which was from fiscal years 1988 to 1989. This trend may be more than an indicator of more people being turned away, as well as more requests for shelter being made from each person, before and if they find a place to stay.

Also, the average length of stay for emergency shelters increased from 5 nights in fiscal year 1985 to 35 nights in fiscal year 1989. This increased length of stay also means that the cost of an average stay in an emergency shelter for one person increased from $125—in 1989 dollars—in fiscal year 1985 to $875 in fiscal year 1989.

It's for these reasons that we, and the agencies that are involved in this program, are urging this committee to fully fund the program at the authorized level.

Thank you, Senator.

Senator D'AMATO. Well, I hope that we'll be able to accommodate the increased funding. I think there's strong support for not only continuation but expansion of the McKinney Bill.

Mr. MOSKOWITZ. Thank you, Senator.

[The statement follows:]

STATEMENT OF JACK MOSKOWITZ

United Way of America supports full funding of the McKinney Homeless Assistance Act programs. We are urging Congress to reauthorize the programs at least to the levels in H.R. 3789, the "Stewart B. McKinney Homeless Assistance Amendments Act."

I am here to report to you on United Way of America's experience as administrator of the McKinney Emergency Food and Shelter Program (EFSP). In fiscal year 1990 the program was funded at $130.1 million. The proposed $140.7 million for fiscal year 1991 under H.R. 3789 is the bare minimum necessary to maintain services already being delivered. More funding is necessary to meet growing need. I understand the House Banking, Finance and Urban Affairs Housing Subcommittee will recommend $150 million. We hope that this amount is approved.

Two years ago, the Emergency Food and Shelter National Board did a survey of the agencies it funds and respondents said the program would need to triple in size to serve the clients they were currently serving. Therefore we urge the Subcommittee to increase funding for fiscal year 1991 to the higher authorized amount.

Maryland's experience clearly demonstrates the need for increased funding. In 1986, the Maryland General Assembly passed legislation mandating the State Department of Human Resources, Homeless Services Program to collect data on homelessness in Maryland, including families and individuals served, as well as the programs and facilities that provide shelter and other services. Since 1986, the Homeless Services Program has conducted a data collection annually, resulting this year in the third consecutive data report.

Below are some summary data from the study that illustrate the need in Maryland for increases in, EFSP funding. All data are excerpted from the Maryland Department of Human Resources, Community Services Administration's publication entitled "1988 Data Collection Analysis: Homeless Services Program."

One hundred and sixty-three shelter programs and facilities were identified and surveyed by the Homeless Services Program.

There were 2,693 emergency and transitional beds in Maryland, of which 383 were new (including expansion beds in existing facilities).

There were 780,677 bednights provided in fiscal year 1989, a 25 percent increase over fiscal year 1988. Baltimore City, Prince George's and Montgomery Counties accounted for 84 percent of the total growth in shelter bednights.

There were 47,176 adults and children who received shelter in fiscal year 1989, a 16 percent increase over fiscal year 1988.

The occasions of turnaway increased 27 percent to 41,337. This trend may be an indicator of more people being turned away, as well as more requests for shelter being made from each person, before (and if) they find a place to stay.

The average length of stay for emergency shelters increased from five nights in fiscal year 1985 to 35 nights in fiscal year 1989. This means that in fiscal year 1985, an average shelter bed served 73 different people in one year, and in fiscal year 1989 that same bed served only 11 different people. The increased length of stay also means that the cost of an average stay in an emergency shelter for one person increased from $125 (in fiscal year 989 dollars) in fiscal year 1985 to $875 in fiscal year 1989.

We have received similar reports from the rest of the country.

The Emergency Food and Shelter Program is not meant to solve the problem of homelessness, but rather to meet an emergency situation; it gets funds to those who need them quickly. The program has unexpected side benefits. Representatives of nonprofit organizations and local government, drawn together to focus on one community problem, have built alliances and linkages that have already helped to provide broader consideration for other community needs.

The nonprofit/government partnership structure of the Emergency Food and Shelter National Board Program is a model for success. In short, it's a partnership that combines national efficiency and local decision-making to deliver support for food and shelter to the homeless in a timely fashion.

In today's era of shrinking federal funds for domestic programs, this program provides a stellar example of how federal funds can be funnel led directly to local communities, providing for local decision making and greater efficiency of available funds.

The program administered by United Way of America is under the direction of a National Board chaired by the Federal Emergency Management Agency (FEMA) and consisting of representatives of United Way of America; The Salvation Army; The National Council of Churches of Christ in the U.S.A.; The Council of Jewish Federations, Inc.; Catholic Charities U.S.A. and The American Red Cross.

The program to aid the hungry and homeless, now part of the Stewart B. McKinney Homeless Assistance Act, was originally created by this Subcommittee in 1983. Since then, $745 million has been awarded to over 2,300 communities. In these 2,300 communities approximately 9,500 service agencies have provided 693 million meals and 196 million nights of lodging to at risk clients.

The success of the Emergency Food and Shelter Program is due to the voluntary/public partnership that exists at all levels—National, State and Local. The National Board is replicated in every state and in each of the 2,300 communities funded. All of the members of these boards serve as volunteers. EFSP is represented at the state and local levels by a local government representative.

The key feature of the program ensuring its success is the decision-making ability of the local boards. At the community level it is critical that decisions on the use of funds be based upon local need. Needs vary from community to community, housing costs vary from community to community, and available services vary from community to community; therefore, it is particularly important that decisions on the use of funds be made locally based on each individual community's needs, costs and services. For example, one community with a large population of mentally ill homeless might use its funds for housing programs to transition these people from shelters and group homes into their first apartment. Another community with low housing costs might put more of its funding into providing food. State geographic areas and local communities work hard in the Emergency Food and Shelter Program and do not take their decision making responsibility lightly. Their decisions help meet critical human needs.

Another very important factor in the Emergency Food and Shelter Program has been the quick response necessary to get the funds to agencies. The national staff, once advised that funds are available, can now notify communities within 10 days of their awards. Another added response mechanism instituted in fiscal year 1990 is an electronic funds transfer system (EFT). EFT has allowed agencies receiving funds to get use of the moneys from 7 to 14 days earlier than if they received a check.

The National Board believes this program continues to be the most efficient and effective way of providing services to the hungry and homeless throughout the country; however, more funding is needed.

The funding which has been provided, as others will testify, is being used by agencies to meet a need that continues to grow in scope. We hope that increased funds will be made available until long term solutions can be crafted to alleviate this critical national problem of providing for the poor and unfortunate.

STATEMENT OF GARY L. BRIESE, EXECUTIVE DIRECTOR, INTERNATIONAL ASSOCIATION OF FIRE CHIEFS

Senator D'AMATO. Gary Briese?

Mr. BRIESE. Good morning, Senator. I'm Gary Briese, executive director of the International Association of Fire Chiefs, here representing Chief Jim Estepp, the president, and the 10,000 members of our association, both career and professional fire officers.

You have our written testimony. What I would like to do is specifically address five items with you.

NATIONAL FIRE ACADEMY

One, we would like to see the National Fire Academy realigned as an operational unit under the U.S. Fire Administration, which has not been done for several years. I think it's essential.

A user fee has been proposed, of $25 per student, to attend the National Fire Academy. While we are in concept opposed to that, if the fee is going to happen, then we feel that the moneys should be returned to the National Fire Academy for operational expenses and not used to offset the general deficit of the U.S. Government.

The third thing is to have the committee look into the site administration costs at the National Fire Academy to ensure that they're properly shared by both the National Fire Academy and the Emergency Management Institute, which they're not now; they're heavily dependent on the National Fire Academy, overly dependent.

The fourth item would be to reexamine the removal of hazardous materials training money from the Superfund Amendment Reauthorization Act, the moneys that were administered through FEMA, to local fire departments.

Senator, you've been involved in that from the very beginning, and we'd ask for your support on trying to get some more money back to train the first responders in hazardous materials management.

NATIONAL INVENTORY PROPOSED

The fifth item is an example given by the large disasters surrounding Hurricane Hugo and the Loma Prieta earthquake, and the near absence of any national inventory for heavy-rescue services. We have conducted a survey that we would make available to FEMA and urge that FEMA use the expertise of the fire service to develop such an inventory.

It's been started under the SLP's program, State and local programs. We'd encourage that be expanded. Currently we do not have any national capability of responding to heavy-rescue situations such as we faced in the earthquake.

In conclusion, Senator—I'll keep my remarks brief—we're joined this morning by Chief Fire Officer Geoff Godfreyson from Melbourne, Australia, who's here taking this opportunity to view the U.S. Government in action.

Thank you very much.

Senator D'AMATO. Thank you, Garry. I think your remark, as it relates to the fees and seeing to it that they're appropriately allocated, makes a great deal of sense.

[The statement follows:]

STATEMENT OF GARRY L. BRIESE

Good morning Senator Mikulski and members of this distinguished Subcommittee. I am Garry L. Briese, CAE, Executive Director of the International Association of Fire Chiefs. I am pleased to appear before this subcommittee regarding the FY 91 appropriations for the Federal Emergency Management Agency (FEMA), representing Chief Jim Estepp, president of the International Association of Fire Chiefs (IAFC). The IAFC is the professional membership association representing nearly 10,000 career and volunteer chief fire officers and leaders who are responsible for the delivery of fire protection and emergency medical services in United States and internationally.

Although the nation's fire chiefs are principally concerned about the federal fire programs within FEMA, those programs being the U.S. Fire Administration and the National Fire Academy, the involvement of the fire services in the recent large scale disasters in South Carolina and California have compelled me to address several other program initiatives within FEMA that we feel merit attention.

The IAFC, like many others in the emergency services profession, has been concerned about the excessive delay on the part of the administration in filling the key policy positions within FEMA. We are pleased that President Bush has nominated two excellent candidates for two key positions within FEMA. We understand that Mr. Olin Greene, Fire Marshal for the State of Oregon, has been nominated for the position of Administrator for the U.S. Fire Administration, and Mr. Wallace Stickney, the New Hampshire Commissioner of Transportation, is scheduled to be nominated as the administration's choice for FEMA Director very soon. I am familiar with both of these individuals and feel that they are both imminently qualified for their respective positions. We hope that the White House will now move swiftly in nominating the superintendent of the National Fire Academy, which was recently vacated by the acting superintendent, Mr. Charles Boehne.

I would first like to address the Administration's proposed budget for the U.S. Fire Administration and the National Fire Academy. In general, the funding levels proposed in the USFA and NFA budgets are not adequate to properly address the national fire problems cited in original 1973 report *America Burning*. The recent highly-publicized fatal fires in New York City and Miami Beach, Florida, underscore a fact that the U.S. still holds the worst fire safety record in the industrialized world. The loss of life is still nearly 6,000 a year, the number of injuries is well over 120,000 and the economic loss is in the billions of dollars.

Despite these statistics, the president and the Office of Management and Budget have maintained only level funding for the USFA and NFA, with only modest increases in the USFA's fire prevention and arson control programs. We feel that the federal fire programs have provided solid benefits for the public and members of nation's fire and emergency service. There are few efforts in the public or private sector that can provide the support for the much-needed research in fire fighter health and safety, fire prevention and arson, and national fire data statistics on a national actuarial basis.

There are several issues of concern to the IAFC that we feel this committee must address. One principal issue is the need to realign the National Fire Academy as an operational unit of the United States Fire Administration. When the USFA was established under Public Law 93-498, the NFA was part of the USFA. The NFA was removed in 1980 when the USFA was threatened with zero funding by the Reagan administration. Fortunately, the wisdom of Congress prevailed and partial funding was returned to prevent the elimination of USFA. We requested this realignment last year, and we urge strongly that this committee direct FEMA to place the NFA back under the USFA.

We are also concerned that this year, FEMA has proposed that students attending the National Fire Academy be assessed a $25 per week "user fee." This fee concerns us for several reasons. The anticipated revenue will be approximately $200,000 (4000 students x 2 weeks x $25). As proposed, these funds will not be directed back into the NETC facility, but simply put into the U.S. Treasury to offset the general deficit. The general rise in operating costs and inflation has prevented needed enhancements of classrooms and other physical plant facilities at NETC .

Although we generally oppose such a fee, we would propose that if such a fee is deemed necessary that the funds raised be directed back to the NFA and the Emergency Management Institute, where they would be used by the Superintendents of the NFA and EMI for the specific purpose of improving and enhancing the learning environments of those institutions. We would oppose any recommendation that those funds be directed back into a general FEMA account. We would also oppose any recommendation that would reduce the federal fire program appropriation by an amount equivalent to the amount raised through the collection of the fee.

We urge this committee to take the necessary steps to ensure that site administration costs are properly shared by both the NFA and EMI. The major share of site administration costs continue to be borne by the U.S. Fire Administration and the National Fire Academy program activities, as opposed to properly allocating overhead costs based on use of the facility by other agency elements.

We are disturbed that the administration has chosen to eliminate the funds requested under Title III the Superfund Amendment and Reauthorization Act (SARA) for hazardous materials training which were made available to states to assist local jurisdictions. In previous years, at least $5 million (from EPA) was allocated for hazardous materials programs. The hazardous materials problem is more prevalent than ever, and the federal government has chosen not to provide any assistance. We understand that the Department of Transportation has not recommended any funding assistance to state and local governments for hazardous materials response in the reauthorization of the Hazardous Materials Transportation Act (HMTA).

Following the recent large disasters involving Hurricane Hugo and the Loma Prieta Earthquake, the need for the U.S. to have a reliable inventory of specialized heavy-rescue response agencies was clearly demonstrated. Additionally, the first responder role of the fire service and their capability to provide specialized heavy-rescue and building collapse response was also clearly demonstrated during those major emergencies.

We feel that establishing such a national inventory should be a top FEMA priority. We strongly suggest that FEMA use the expertise of the fire service in the development of that inventory. In fact, the existing inventory of fire service heavy-rescue teams recently compiled by the IAFC can be made available to FEMA.

The IAFC strongly feels that the role of federal government with regard to fire protection in the U.S. must be maintained. The IAFC sincerely appreciates the past support of this Subcommittee and Congress and hopes you will continue to support and solidify the federal fire programs, and we stand ready to assist you. I will be pleased to respond to any questions which you or other members the subcommittee may have.

STATEMENT OF P.D. ROSS, PRESIDENT, NATIONAL EMERGENCY MANAGEMENT ASSOCIATION

Senator D'Amato. I think we have an added starter here: P.D. Ross, president of the National Emergency Management Agency.

Mr. Ross. Good morning, Senator, R.D. Ross. I'm the director of the Missouri Emergency Management Agency and the president of the National Emergency Management Association. I appreciate this opportunity to be with you.

Certainly 1989 was a year of disasters like the United States has never seen before. We certainly strongly endorse FEMA's overall budget request of some $819 million for fiscal year 1991. Suffice it to say, this Nation's ability to respond to the most severe national security threat of either overt or covert attacks upon this country or, second, catastrophic natural or technological hazards, such as we witnessed in late 1989, has been built empirically by 40 years of civil defense funding. No such system would exist in this Nation without that funding.

EMERGENCY MANAGEMENT ASSISTING FUNDING

I would like to focus on other budgetary concerns in three key programs. First, increasing the emergency management assistance funding to the States and the local communities from the President's request of $63 million to $65 million. A modest increase is obviously in order after a year like 1989 and like what we're seeing now in the South with the flooding.

Second, we certainly support FEMA's overtures, and the administration's overtures insofar as major increases in the earthquake funding is concerned.

Finally, NEMA strongly encourages the restoration of the $5 million for section 305 of title III of the Superfund reauthorization to support State and local hazardous materials training. Last year FEMA did not request this funding but this committee wisely included $3.8 million. We appreciate this effort. Again, FEMA did not request funds for fiscal year 1991.

Furthermore, we urge that FEMA be provided with adequate budgetary support to effectively assume a more active role in all aspects of hazardous materials preparedness response.

Thank you very much. I appreciate the opportunity to testify.

Senator D'Amato. Well, thank you very much.

We're going to move on to our next panel of witnesses. But we are mindful of the suggestions that you have made and certainly I think you're going to see some address to the problems you bring forth.

Our next panel: Dr. Sponsler, Institute of Electrical and Electronic Engineers; Dr. Spilhaus; Jonathan Grindlay; Cort Durocher; and Dr. Richard Holt.

Dr. Sponsler?

NATIONAL SCIENCE FOUNDATION

STATEMENT OF GEORGE C. SPONSLER III, CHAIRMAN, IEEE-USA AEROSPACE R&D POLICY COMMITTEE

Dr. SPONSLER. IEEE supports the President's proposed 1991 budget for the National Science Foundation.

Senator D'AMATO. George, would you do me a favor? We'll give you a little extra time. Slow down and pull that microphone in front of you so the young lady can hear you.

Dr. SPONSLER. Certainly.

Fortunately, nobody had turned the light on.

IEEE still supports the President's proposed 1991 budget for the National Science Foundation. There are, however, two critical problems: inadequate support for engineering technology research and an inadequate level of funding overall.

ENGINEERING AND TECHNOLOGY RESEARCH

The National Science Foundation engineering research divisions, with the exception of the Engineering Centers Program, received no more funding in fiscal year 1990 than they did in fiscal year 1989. Proposed increases for 1991 are substantially less than the overall increase for all of NSF. Technology research is key to industrial competitiveness; it deserves greater support, both proportionately within NSF and as a part of the entire national budget.

Turning to the National Aeronautics and Space Administration, IEEE welcomes the President's strong support of NASA's proposed 1991 budget and especially his emphasis on advanced technology, but with one exception—what we believe to be NASA's overemphasis of the space station and of manned missions.

EARTH OBSERVING SYSTEM

The overall NASA program needs a better balance between automated spacecraft and probes and manned aerospace transport. Over the years NASA has orbited a number of application satellites to help us to communicate and to better understand our planet. For example, as NASA moves forward with its EOS, it will be making what may be the most important measurements ever of Earth. Given our struggle to keep our environment suitable for human life, these programs deserve greater emphasis commensurate with their great contribution to our life here on Earth.

But justifications for Space Station Freedom and the space shuttle remain uncertain and contradictory. NASA's reliance on the shuttle for all launches significantly increases the launch cost per pound of unmanned vehicles. We strongly recommend development of a new family of unmanned, cost-effective booster rockets to overcome this problem.

A new, more reliable vehicle is also needed to replace the shuttle. The Department of Defense seems eager to transfer total responsibility for the national aerospace plane to NASA; we strongly recommend NASA acceptance. NASP has great potential and should be given greater immediate emphasis in a reoriented NASA manned space program as successor to the shuttle.

In conclusion, what is demanded is agreement between NASA, the Space Council, and the Congress as to what our Nation's space programs should be. If our Nation is to maintain its lead in aeronautics and space R&D, our future aerospace success demands agreement and cooperation on objectives and budgets between NASA, the White House, and Congress.

Thank you, Senator.

Senator D'AMATO. Thank you very much, Doctor.

[The statement follows:]

STATEMENT OF GEORGE C. SPONSLER III

Good morning Madame Chairwoman and members of the subcommittee. My name is George C. Sponsler, III, and I serve as Chairman of the Aerospace R&D Policy Committee of the Institute of Electrical and Electronics Engineers - United States Activities (IEEE-USA). I am pleased to present the views of the IEEE-USA on the FY 1991 budget requests for the National Aeronautics and Space Administration and the National Science Foundation.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

The Aerospace R&D Policy Committee of the IEEE-USA has reviewed the Administration's civil aerospace policy and proposed 1991 NASA budget. We welcome the President's strong support of the U.S. civil space program and especially his emphasis on advanced technology, but with one exception: what we believe to be NASA's overemphasis of manned missions in general and the space station in particular. We believe the overall NASA program needs a better balance between automated spacecraft and probes, and manned aerospace transport.

Space Station Freedom

In the Administration's budget document, Space Station Freedom is described as "the world's first permanently-manned microgravity and life sciences laboratory. It will eventually have the capability to service satellites in orbit and to serve as a way station on the journey to the moon and Mars." NASA has proposed that "FY 1991 will be the year that Space Station Freedom makes the critical transition from design to actual fabrication of major long-lead-time hardware." (Statement of Richard H. Truly, NASA Administrator, January 29, 1990). Yet justifications for the project remain to a certain extent contradictory, intertwined with the need for international leadership and technological prestige. NASA's overall priorities are not well determined, and do not convey commitment to a balanced space program, such as we support, or to advancing U.S. competitiveness. Agreement is lacking in both the technical and political communities as to the particular applications which the space station could best serve, especially in light of overall budgetary restrictions. The issue raised is one of cost/benefit: do the projected uses of the space station justify commitment at this time to construction of the presently proposed design, especially in light of its probable total cost of some 30 billion dollars?

It is unwise to embark on a major program merely because it is technically feasible, or because it makes use of resources which happen to be available and which may serve vested interests. To avoid such criticism of Space Station Freedom and of manned space flight, it is essential that their respective missions be carefully defined and generally accepted as nationally important and economical.

Determining Space Priorities

We do not recommend reduction of the planned total NASA budget but rather reprogramming to support other applied research and exploratory development needed to define and to develop an integrated space program that advances U.S. industrial competitiveness. The integrated national space program we envision would address such basic questions as: why we want to be in space; what specific benefits would be gained by implementing the program that would justify the necessarily large costs; and what parts of the envisioned program should logically be accomplished on a shared basis with international partners.

Historically, mankind has crossed the oceans and explored the earth's continents primarily in search of riches and congenial places to live. Do similar considerations govern our future in space; that is, do the need for natural resources, the degradation of our environment, and the exploding earth population dictate our advance into space? Or do international relations, national prestige, and/or economic competitiveness demand our exploration of space? We must determine whether these factors and possibly others guide our destiny in space and provide the needed rationale for our space expenditures.

A New Balance

We suggest that as part of its review, NASA should consider reorienting its R&D into two balanced and complementary programs: Automated Satellites and Probes (ASAP) and Manned Aerospace Transport (MAST). ASAP would include all earth orbit applications satellites, including ACTS, EOS, Mission to Planet Earth, etc., and all the scientific space probes like Magellan and Cassini. MAST would combine all NASA work on man in both atmosphere and space, including the space station, the shuttles, aviation R&D, and the National Aerospace Plane. High priority would be given to reducing the cost of manned space flight.

Automated Satellites and Probes (ASAP)

ASAP encompasses unmanned activities including all earth applications satellites - including communications, navigation, weather, Landsat and other earth observation satellites for environmental, national resources, and land-use applications, as well as platforms for solar power and other purposes - in addition to the automated space probes of which NASA and the nation are so justly proud. The space probes would precede and facilitate manned exploration of space; and NASA's automation and robotics R&D would bridge both programs.

For example, through such programs as EOS and Mission to Planet Earth, NASA could help solve, or at least provide promising approaches to address, environmental problems such as: global warming; better management of the biomass for atmospheric purity; and ozone depletion. We believe ASAP R&D funds should continue for such robotics projects as the $337 million Flight Telerobotic Servicer, which could be used not only to help astronauts assemble and service a possible future space station, but also maintain, repair or modify low-earth-orbiting satellites. Such an investment would help the U.S. to maintain commercial preeminence in automation systems.

Space provides a unique viewpoint of, and opportunity to exploit and protect the Earth. Congressman George E. Brown, Jr. has proposed that the U.S. space program concentrate upon development of what he calls "Greater Earth." We support his proposal and its important implications for earth observation, space transportation and satellite programs.

Over the years NASA has orbited a number of satellites carrying important remote sensing instrumentation to help us understand our planet and its unique ecological systems. As we move forward with the Earth Observing System (EOS), NASA is moving towards what may be the most important measurements of Earth ever made, given our struggle to keep our environment suitable for human life. As EOS moves forward in design and implementation, it is imperative that we avoid repeating the mistakes of past U.S. Earth observation satellite projects. These mistakes have included vastly underfunded data analysis and interpretation programs, lack of funding and scheduled time for proper instrument characterization before launch, and data archival techniques that have led to the uselessness of substantial quantities of past observation data. Essential funding for the ground segment of EOS should be provided early in that program if NASA is not to repeat similar mistakes it has experienced with earlier earth observation programs.

NASA's prior emphasis, during the Reagan administration, on manned space flight and more particularly on the Shuttle, was detrimental to its satellite applications and unmanned space-exploration programs in a vital aspect: exclusive reliance upon the Shuttle for all launches significantly increased the launching cost per pound of unmanned vehicles. The Shuttle's own launch delays and the tragic Challenger accident both drastically reduced the frequency of satellite and probe launches. Indeed, there were no space probes launched over an entire decade from 1979 through 1988, inclusive. Fortunately, that lamentable situation has already been corrected by the Bush administration with the launching of the Magellan, Galileo, and the Hubble Space Telescope.

But the launch costs per pound are still exorbitant because of NASA's continued reliance upon the manned Shuttle for all its launches. We strongly recommend development of a family of unmanned, cost-effective booster rockets to overcome this problem. These boosters could be developed commercially, with NASA purchasing launches and helping to defray development costs. What matters is that they be developed quickly and be put into service.

It would be too lengthy to summarize all the various applications satellite programs which do or should exist under NASA auspices. But one in particular has been languishing which offers great promise and which is on the verge of completion: the Advanced Communications Technology Satellite (ACTS).

The ACTS program was begun in 1983 in an effort to regain U.S. leadership in satellite communications. NASA, which had led the world in the field in the 1960s, halted its efforts in the mid-70's when commercial systems were developed. Since then, a number of countries -- Canada, France, Germany, Italy, the U.K., and particularly Japan -- have mounted extensive development programs and have forged ahead of the U.S. in many areas of relevant technology.

The ACTS program, which will have cost the U.S. taxpayers about $500 million over the years, is intended to test and demonstrate a set of advanced technologies needed to make a singularly important stride in satellite communications: a change in basic philosophy in the use of satellites from simply passive channel routers to active processing and communications switching centers in orbit. ACTS' successful demonstration of these technologies will change the very nature of communications satellites, serve to position the U.S. to retain its present market share, and hopefully gain an ever-growing future portion of the $5 billion annual satellite communications market.

But NASA does not appear prepared to exploit the anticipated success of the ACTS program operationally. Indeed, NASA has been perceived historically as not even supporting ACTS. Since the program's inception in 1983, until this year, OMB has deleted the requested funding for ACTS from the NASA budget annually. Fortunately, each year the Congress has restored it. One particularly adverse effect of this history is that NASA has inadequately planned for the test and demonstration period following the launch of ACTS. This deficiency is in spite of NASA's unprecedentedly successful experiences planning and executing long-duration demonstration experiments with public participation on the ATS-6 and CTS programs in the mid-1970's. But today there are no adequate plans to test ACTS' performance in orbit or to demonstrate its ability to provide advanced and specialized services. The envisoned ground complex of terminals and user equipments is completely inadequate to test, calibrate, and demonstrate the ACTS system properly.

Manned Aerospace Transport (MAST)

MAST would concentrate upon developing the most cost-effective approaches to manned exploration of space: addressing the need for the space station, possible use of the Shuttle and the space plane as space platforms in lieu of space stations; possible use of the space plane to service a space station or in conjunction with other approaches to send men to the moon and Mars, development of an "Orient Express" or other transoceanic transport, novel aircraft design, and the like. In a balanced environment, it should be possible to assess more clearly the place of true space stations in the U.S. space program, and to determine what configurations would best serve those needs.

The Department of Defense seems eager to transfer total responsibility for the National Aerospace Plane (NASP) to NASA; we strongly recommend that NASA should accept it. We believe that the NASP has great potential and should be given greater immediate emphasis in a reoriented NASA manned space program as successor to the Shuttle. In current proposed Administration plans, the aerospace plane is part of the so-called Moon/Mars Initiative with a proposed 1991 budget of only $277 million, a modest growth from the enacted 1990 budget of $254 million. We suggest the budgeted amount should be doubled, reprogramming the funds presently planned for beginning the fabrication of the space station, which would be postponed.

Part of the augmented NASP R&D funding should be devoted to defining its proposed uses better. In this regard, we believe the NASP should ultimately replace the Shuttle (with increased utility), but not be given the Shuttle's present mission of launching satellites, which probably could better be accomplished with unmanned launch vehicles. The NASP could carry cargo and crew to a future space station, help in its construction, or possibly replace it for simpler short-duration missions. It is even possible, though perhaps not cost effective, that the NASP, equipped with a small Lunar Transfer Vehicle (LTV), could be used to ferry men to the moon, much as was done in the original Apollo program. The NASP could also be employed as an "Orient Express" transport for global distances of 10,000 miles or greater.

The NASP program we envision might or might not evolve into two separate space planes, as presently planned. We would preserve the space transport version presently proposed, but possibly modify or even abandon the planned Mach 5 hypersonic plane. The "Orient Express" mission would be preserved, but essentially the same version of the NASP would be used as for its space operations (without rocket boosters and probably with different jet fuels). The NASP we envision would employ a somewhat conventional jet engine to take off from a conventional runway, employ ram and scram jets to boost itself into, say, Mach 25 flight at the top of the troposphere, and then use expendable rocket engines to boost it into even higher stratospheric earth orbit. The R&D problems with the engines, flight-control, and materials will require intense industry effort, but should have considerable commercial value and correspondingly enhance our technological competitiveness.

Such R&D would be consonant with NASA's historical mission and make full use of its, and of industry's, capabilities. The NASP would also be timely in that extensions of more conventional aeronautics' R&D may be approaching a technical asymptote in purely atmospheric flight. As attested by the R&D and associated planning for the Navy's Advanced Tactical Aircraft (ATA) and the Air Force's Advanced Tactical Fighter (ATF) the problems posed by high-speed manned flight, particularly at low levels but also at high altitude in the atmosphere, are becoming increasingly difficult to solve at reasonable expense. Except for specific low-level flight requirements, the natural solution is to go beyond the atmosphere, where NASP would fly.

Conclusion

And so we are led full circle: what is demanded is agreement between NASA, the Space Council and the Congress as to what our nation's space programs should be. We particularly need clearly defined goals. When goals have been clear, such as in the case of the Apollo program, NASA has proven adept at determining what needs to be done. Without clear national goals in space, backed by unambiguous budget support, NASA has shown an unwillingness or inability to plan accordingly. Today NASA needs help to justify, prioritize, and to select its programs, both manned and unmanned.

NATIONAL SCIENCE FOUNDATION

In past years, the IEEE-USA's Engineering R&D Policy Committee has provided detailed comments on various aspects of the NSF budget. Space limitations preclude us from going into that detail in this statement, however, we will be glad to supply such detail if requested. Our position is that the judgments used in creating it are basically sound. We wish to focus our comments on two critical problems regarding the NSF budget: an inadequate level of funding overall and inadequate support for engineering technology research.

In the past three Fiscal Years, the NSF has had strong support from both the Administration and the congressional authorizing committees aimed at a goal of doubling the NSF budget over a period of five years. We have endorsed and continue to endorse this national goal. We are extremely disappointed, however, that annual appropriations have fallen severely short of this goal. While we recognize the need for fiscal austerity given the current Federal budget deficit, the U.S. has been "eating its seedcorn" for a number of years through inadequate funding for engineering research. This can, as the recent past demonstrates, only lead to worse economic performance and is extremely shortsighted.

We note with alarm that the NSF engineering research divisions, except for the engineering centers program, received no more funding than in 1989 and proposed increases for 1991 for the research divisions are substantially less than the overall NSF increase. This will have an adverse impact on research, graduate student production, and ultimately, U.S. economic competitiveness.

We are gratified by the support NSF has made available to basic sciences. However we believe it is most essential that adequate support also be made available to those portions of the NSF budget dealing with technology. These activities occur primarily in the Engineering and Computer Directorates and include support of the NSF Engineering Research Centers and the Science and Technology Centers. We cannot emphasize too strongly that the economic strength of this nation in the next decade is closely coupled to the national investment in technology, including major portions of the NSF.

We urge the Congress to support the President's budget levels for the NSF in Fiscal Year 1991, and act to ensure that research and development, both within the NSF and throughout the Federal government, be accorded the highest priority to protect the future economic well-being of the U.S.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

STATEMENT OF DR. A.F. SPILHAUS, JR., EXECUTIVE DIRECTOR, AMERICAN GEOPHYSICAL UNION

Senator D'AMATO. I'm going to call our next witness, and I'm going to have to leave. But Senator Mikulski is on her way and we're going to keep the record open.

Dr. Spilhaus?

EARTH PROBES PROGRAM

Dr. SPILHAUS. I'm executive director of the American Geophysical Union, a scientific society of 25,000 scientists devoted to the study of Earth and its environment in space.

On the NASA budget, as scientists, the specific actions we urge, first, are that the Earth Probes Program be given a much stronger start in fiscal 1991 by doubling the program's level of funding. The higher level is needed to provide data continuity and to move the existing mission queue in step with the readiness of the scientific community to make good use of the data. The increase is possible within an essentially level NASA applications program, if the Earth observing system [EOS] is considered a new add-on.

EARTH OBSERVING SYSTEM

Our next recommendation is that EOS be started, but the entire EOS funding must be over and above the existing NASA space science and applications program. EOS scientific objectives must be well defined before the engineering design is fixed. Both the scientific flexibility and continuity of observations must be incorporated into the program. Sixty percent of the funding should continue to be reserved for data handling, analysis, and research, and the data system should be operating with existing data by 1994, and the first platform launched by 1998.

Third, for NASA, we suggest that multiyear funding for the space station not be approved. Such funding would put the whole NASA science program at risk because it gives preferential treatment to a huge project. Furthermore, we do not believe that the proposed space station could be justified on the basis of science.

GEOSCIENCES

For the National Science Foundation, the American Geophysical Union urges that the proposed 1991 budget for geosciences be fully funded. There is a strong need for the major increases it contains for solid Earth science and for global change research. In the NSF Science and Engineering Education Program, increased emphasis is required on the geosciences to give the next generation of American citizens an understanding of Earth's resources and of environmental constraints.

We must also assure that the Nation will have the scientists needed for research programs like global change, which will be increasingly important as we push our planet's tolerance limit. Last year this education program made no awards in Earth science in 8 of the 11 States represented by members of this committee, and a meager 3 percent of the awards nationwide were in these critical areas.

Thank you.

[The statement follows:]

Statement of Fred Spilhaus

Thank you Madam Chair for this opportunity to testify to you and the Committee on the 1991 fiscal year appropriations for NASA and NSF. To introduce myself, I am Fred Spilhaus, Executive Director of the American Geophysical Union, AGU. In my testimony I will be speaking for our President, Don Anderson of Caltech, and for the over 25,000 members of AGU, the largest scientific society devoted to the study of our planet Earth.

First of all, let me say that AGU strongly endorses the need for an international program, with a strong U.S. component, to better understand our home planet Earth on a total Mission to Planet Earth basis. This means studying not only problems such as global warming and ozone depletion but also earthquakes, resource location, water availability and so on. Geophysicists recognize that we are far from an adequate understanding of our planet. It is important to recognize that while the Global Change program includes important elements of the total program needed to understand our planet, it is not sufficient by itself. In this context, AGU strongly supports the fiscal 1991 budgetary levels proposed for geophysics in both NASA and NSF. NASA and NSF, of course, provide the majority of the funds for such research in the U.S. and hence their budgets are of critical importance. Because of this critical importance, we would urge a number of specific actions within the proposed fiscal 1991 budgetary levels. Starting with the NASA budget:

First, that the relatively small yet exceedingly valuable Earth Probes program not be lost among the very large programs but instead be given a strong start in fiscal 1991. Specifically that this Goddard Explorer programs level of funding be approximately doubled to about 50 million dollars. This enhanced level is needed to make timely progress on the existing mission queue that includes sea-surface wind, ozone, ocean color, tropical rainfall, land topography, soil moisture, and both

Earth's magnetic and gravity field missions. Even with this funding level, the Earth Probes program will only be about half that of the existing Goddard Physics and Astronomy Explorer program which has historically been so instrumental in training students, allowing for quick experiment concept validation, giving observational flexibility, and providing the ability to place instruments into specialized orbits. This increased Earth Probes funding level could be accommodated within an essentially level NASA Applications program if EOS is considered an augmentation.

Second, the Polar Program's fiscal 1991 budget be approved, including the highly appropriate increased effort in the Arctic. The separate and delayed appropriations in the U.S. Antarctic program in fiscal 1990 unfortunately resulted in problems with Navy support and aircraft upgrading for the Antarctic program and should not be repeated in this year's appropriations process if at all possible.

Third, and of special importance, increased emphasis be given to science education in the geosciences (that is, solid Earth, hydrologic, ocean, atmosphere, and space physics science) to provide both an educated public and the researchers needed for such large new programs as Global Change and its focused EOS program. For example, the NSF Science and Engineering Education program last year gave out about 1,300 awards. However, only about three percent of these were directed to any of the geosciences related to understanding Earth. In the state of Maryland, for example, there were a total of 27 Science and Engineering Education awards with 15 of these in specific areas of science and engineering. However, not a single one of these awards was focused on any of the physical sciences directly related to our Earth. Nor were there any such awards in three-quarters of the states represented by members of this committee. The 23 percent NSF budget increase in fiscal 1991 for Science and Engineering Education should certainly make possible a correction to this lack of attention to our home planet, Earth.

Finally, Madam Chair, I would like to thank you and the committee on behalf of the American Geophysical Union for considering our views on how to strengthen the U.S. program to understand Earth within the constrained resources. The formal AGU positions relative to the fiscal 1991 budget which have been adopted by our Council as the consensus of our membership and which form the basis for my testimony are, of course, available. I would, of course, be more than willing to provide these or any additional information related to these issues that would be of help to the Committee.

STATEMENT OF JONATHAN E. GRINDLAY, CHAIRMAN, SPACE SCIENCE WORKING GROUP, ASSOCIATION OF AMERICAN UNIVERSITIES, AND NATIONAL ASSOCIATION OF LAND-GRANT COLLEGES

Dr. **Grindlay**. Mr. Chairman, Mr. Kelly, thank you very much for allowing me the opportunity to testify.

My name is Jonathan Grindlay. I'm professor of astronomy at Harvard and chairman of the department of astronomy at Harvard, and also currently the chairman of the Space Science Working Group, who I am representing before you today.

EXCITING ACCOMPLISHMENTS

After an extended long wait, the U.S. space program this past year has witnessed a long-awaited return of exciting accomplishments for the space sciences. We feel that there really is a vigorous new beginning, as epitomized by launches of Magellan, the cosmic background explorer, which is already producing exciting results, Galileo to Jupiter and just recently, of course, the Hubble Space Telescope.

The tremendous public interest in the Voyager flyby to Neptune last summer showed that once again the space program still captures the imagination and excitement of the American public.

As an element of national policy, a strong and active space program provides a highly visible demonstration of this Nation's scientific and technology prowess and its determination to maintain its status as a world leader. A robust space science program can also help address another pressing national priority, which is one of the key points I want to make before you today—namely, the needs to reverse the declining interest and skill in science and mathematics in the upcoming generations—a point that, of course, has been made by many other groups.

Almost daily we read of new studies showing that math and science skills of our young students lag far behind those of other countries. We believe that the space program can continue to be an exciting catalyst in this area. Let me add that, as an educator at Harvard, I feel particularly strongly about these points.

BROAD-BASED PROGRAM

The proposed 1991 budget that I would like to make a few brief remarks to, we certainly support and we urge your committee to also support. Very briefly, in the major discipline areas, it provides a broad-based program. It provides for a continuation of the strategic plan developed by the Office for Space Science and we feel that this balance is crucial.

Despite the many positive features of the proposed 1991 budget in virtually all of the disciplines, there are concerns that the Space Science Working Group would like to bring to your attention. Foremost is the highly constrained R&A grants program, particularly grants to university researchers.

PLANETARY SCIENCE

The situation in planetary science is especially critical this year, as it was last year. There is, this year, a real decrease in the proposed budget in grants that are available to researchers and we urge that this program not be held in this very tight situation.

Finally, another concern, let me mention, is that the proposed space exploration initiative [SEI] is something that we support for the infusion that it can give to the long overdue discipline of the life sciences at NASA. But we urge that this new support not be at the expense of a balance program.

Let me conclude with the major recommendations that we would like to make:

First, that the proposed 1991 budget which, as I say, does maintain the carefully constructed strategic plan be supported.

Second, we urge that the R&A grants programs be enhanced and that the opportunity be taken to build the educational strengths that NASA can help provide; for example, with an enhanced graduate fellowship program. Let me call to your attention that the NASA Graduate Student Researchers Program, a very visible and successful fellowship program, only awards 40 fellowships per year to the Nation's universities. That's, of course, a 5-percent or less fraction of comparable fellowships from the NSF. We think that number should be increased significantly.

Third and finally, the point that I made about the SEI initiative. We are pleased that this is providing long overdue support for life sciences, but we urge that this not disrupt a balanced core program.

Thank you for the opportunity to testify.

Senator **Mikulski** [presiding]. Dr. Grindlay, thank you for your testimony. I don't know if you were here when I said that—and to all the other witnesses—that our necessity to move with a quick step today in no way is meant to minimize the significant testimony being presented by all in attendance. Certainly the head of the Astronomy Department at Harvard, speaking for both the land-grant colleges as well as other academics in astronomy, is most important.

I feel that your testimony is core and key to what we'll be doing in terms of our space appropriations. You are, therefore, invited to submit all supplementary material you might wish to, representing your organizations, that would essentially support this rather crisp condensation.

To all who are testifying, we could hold all-day hearings on this. But in behalf of AAU and the National Association of Land Grant Colleges, who I know you represent, if there are supporting documents, amplifications of your testimony, clinchers, as we'd say, they're most welcome.

Dr. **Grindlay**. Thank you very much. We'll provide them for you.

[The statement follows:]

STATEMENT OF JONATHAN E. GRINDLAY

Mr. Chairman, Members of the Subcommittee, thank you for this opportunity to testify on the subject of NASA's Space Sciences and Applications program. My name is Jonathan Grindlay, and I am Professor of Astronomy and Chairman of the Department of Astronomy at Harvard University. I am speaking here today as Chairman of the Space Science Working Group (SSWG), on behalf of the Association of American Universities and the National Association of State and Land-Grant Colleges, whose members represent most of the major research universities in the United States.

After an extended hiatus in the U.S. space program, this past year has witnessed the long awaited return to exciting accomplishments for the space sciences. The successful launches of the Magellan Mission to Venus, the Cosmic Background Explorer, the Galileo mission to Jupiter and its satellites, and the Hubble Space Telescope, have put into place missions which promise fascinating new observations to be carried out over the decade of the 90s. The tremendous public interest in the Voyager flyby of Neptune last summer showed once again the ability of space exploration to inspire our citizens while at the same time broadening our view of the universe.

As an element of national policy, a strong and active space program provides a highly visible demonstration of this nation's scientific and technological prowess and its determination to maintain its status as a world leader. At an intellectual level, space science epitomizes our innate inquisitiveness about our environment and our place in the cosmos. At a technological or engineering level, space presents profound challenges that drive industrial creativity. At an emotional level, space offers the unique opportunity for all of us to experience the thrill of exploration of an expanding frontier, and the enrichment one gains from observations of the wonders of other worlds. The U.S. space program must achieve a balance among these perspectives, which calls, in turn, for a balance between science and applications, between manned and unmanned activities in space, between large complex missions and small rapid turn-around missions (eg. suborbital programs), and between infrastructure and new initiatives.

A robust space science program also can help address another pressing national priority - - the need to reverse the declining interest and skill in science and mathematics in the upcoming generation. Almost daily we read of a new study showing that the math and science skills of our young students lag far behind those of other countries. It is essential to strengthen those national programs that capture the scientific and technical imagination of our population. Our space program has been and can continue to serve as a catalyst in this area.

It is within this context that I, on behalf of the SSWG, offer the following comments on the FY91 NASA budget. On behalf of the SSWG, I recommend that the following actions be taken by Congress:

1) support the proposed FY91 budget which maintains the carefully constructed Strategic Plan of OSSA including a balanced program for space science

2) support an enhanced Research and Analysis (R&A) grants program at the nations universities and an enhanced graduate student fellowship program to build a stronger future for the nation in science and technology

3) support the new initiatives for Life Science and Planetary Science independent of the Space Exploration Initiative (SEI) and not at the expense of the historical levels of support for a balanced core program for space science within NASA.

Strengths of the Proposed FY91 NASA Budget

The SSWG commends NASA and President Bush for submitting a FY91 budget which allows for continued implementation of the long-range OSSA Strategic Plan. It provides for a balanced program across the disciplines of space sciences and applications, and allows a new start for the Earth Observing System (EOS). This new start represents the cornerstone for the Global Change Research Program. The budget also provides a new beginning for the Space Exploration Initiative (SEI), announced by the president and of particular interest to the Life Science and Planetary Science programs.

The proposed FY91 budget supports the various Space Science and Applications disciplines as follows:

In *Physics and Astronomy*, the budget request supports the enhanced Mission Operations and Data Analysis (MO&DA) needs of the Hubble Space Telescope (HST), and other missions to be launched this year (ROSAT, CRRES, and GRO). It allows for a modest continued enhancement of the Explorer program and the continued development of the previous new starts for the Global Geoscience (GGS) mission in space physics and AXAF, the third of the Great Observatories.

In *Planetary Science*, the budget provides for the MO&DA support for the recently launched Magellan and Galileo missions to Venus and Jupiter. It provides necessary funds for the long-delayed launch of the Ulysses mission and the continuation of last year's new start for the CRAF/Cassini mission. Within the framework of SEI, funds are requested to begin development of the Lunar Observer as well as to enhance the Mars Observer science payload and ground system.

In *Life Science*, the budget request provides a significant increase, partly to make up for funds not granted in FY'90 and partly to allow the two imminent life science missions on Spacelab (SLS-1 and IML-1) to be conducted. A modest start of a dedicated and reusable satellite experiment, Lifesat, is also included. SEI will support Extended Duration Studies and Centrifuge Development on the Space Station as well as a Biomedical Monitoring and Countermeasures (BMAC) program.

In *Earth Science*, the budget provides for the new start for the major EOS program, which will eventually double the number of university researchers using space techniques in the earth sciences. The budget provides for continued support for the TOPEX and UARS missions. In addition, a new small satellite program, Earth Probes, is to begin. This program is as ideal for university participation and the training of future scientists as the Explorer program is for Physics and Astronomy.

Concerns for the FY91 Budget

Despite the many good features of the proposed FY91 plan, there are additional concerns, which are of great importance to the university space science community.

The continued uncertainty in the development and cost of the Space Station Freedom is one great concern. It is unfortunate that this has already resulted in delays or possible cancellations of the Space Station Attached Payloads program for science missions that could be done especially well from the Station.

The highly constrained R&A grants program is also a concern to university researchers. The clearest example is in Planetary Science, which would sustain a real decrease for the second year in a row. This situation will be aggravated by the fact that several important programs are not in the budget as submitted, including the Magellan extended mission and the placement of U.S. instruments on the Intercosmos- Mars '94 Mission. The lack of an "International Missions Line," supported by the SSWG last year, means that support for a number of on-going modest experiments on foreign missions must come from already overly-strained R&A budgets; as a result important university grants programs suffer.

University grants programs also suffer from the apparent lack of contingencies in major NASA missions. For example, during this past year launch delays of HST, COBE and GRO, GRH sequestration and the "drug tax" have resulted in severe fiscal strains within OSSA which eliminated the Global Heliosphere and most of the Max '91 (for the current solar maximum study) Programs. Another victim of budgetary pressures in OSSA is the cancellation of the ASTRO-2 mission, which would recoup the investment in this PI-class mission (ASTRO-1 is now on the shuttle launch pad at Cape Canaveral).

In addition to the ongoing R&A problems, the budget request for the development of future components of the Strategic Plan appears to be low. Enhanced Advanced Technology Development (ATD) funds necessary to prepare technologies for the fourth great Observatory, SIRTF, were not included, nor was the proposed SOFIA mission. SOFIA, an IR telescope mounted in a 747 aircraft, is ideal for hands-on training of future generations of space scientists, and a significant portion of its total development cost would be borne by the Federal Republic of Germany. Expanded opportunities for developing new technologies and training of experimenters are also not adequate to meet future needs. The sub-orbital program (experiments on aircraft, balloons and rockets) offers a particularly cost effective and yet powerful way of achieving these objectives.

As regards the Space Exploration Initiative (SEI), the SSWG has two areas of general concern. Firstly, the long- overdue support for the Life Science program, as well as some components of the Planetary program, are perhaps tied dangerously to the SEI start. Secondly, we feel that a balanced core program for space science and applications must be preserved (e.g. with the OSSA budget for the core program continuing at approximately 20% of the NASA total) and that the major initiatives of the Global Change Program and SEI should not displace this.

A Strengthened Academic Participation in the Space Sciences

With the overdue launches occurring this year, we are now entering a second "golden age" of space science in the United States. To carry out these programs, however, requires highly trained personnel which can only come from the University base. For over a decade, however, universities have witnessed a steady decline in the number of U.S. graduate students entering such basic science and engineering fields. Furthermore, several recent studies project a severe shortage of Ph.D.s in the coming decade. Thus, we can conclude that our existing system is not well positioned to provide the human resources which will be necessary to carry out these national programs.

How can these trends be reversed? A vigorous national space program is necessary to help reverse these downward trends by igniting the curiosity that will attract many students to careers in science and engineering. Federal support is needed for academic programs at all levels, including the graduate level.

An increase in the present NASA Graduate Student Researchers Program, which only supports 40 new fellowships (up to 3 years) at the nation's universities each year, would be enormously effective. Once at a university, students are attracted to space research by opportunities for "hands-on" experience in research programs on the campus. Students respond to tangible access to space research activities.

Once attracted to the field, some of these students will continue their careers in space science research if, and only if, they foresee attractive career opportunities. To the extent that they witness long delays, sudden cancellations, and chronic shortages of R&A support, many students will choose alternative career paths.

Thus, we believe the best way to carry out the program is to continue strong university participation in all aspects of space science research, and to ease the serious shortages of grant support in order that young people may see this area as one they want to enter.

Overall Recommendations

The proposed FY91 budget will allow continued implementation of a long-term plan that will return this nation's program in space science to one of vision and vitality. The plan remains responsive to the recommendations of NASA and National Academy of Sciences (NAS) scientific advisory committees. Therefore, the SSWG urges that the FY91 budget for OSSA be adopted at the requested level; that the R&A lines be protected from contingencies and that enhanced support for individual investigators and graduate student fellowships be found; and that the overdue support for the Life Sciences and SEI not be at the expense of a balanced core program of space science.

Thank you again for the opportunity to present this testimony. I would be pleased to answer any questions.

STATEMENT OF CORT DUROCHER, EXECUTIVE DIRECTOR, AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS

Senator MIKULSKI. Now, let's turn to Mr. Cort Durocher from the American Institute of Aeronautics and Astronautics.

Mr. DUROCHER. We represent 44,000 aerospace professionals and support NASA's budget request. We would like to make the following additional points.

The NASA aeronautics budget is only 1.5 percent of the U.S. aircraft sales booked last year. Aerospace exports were $26 billion. Subsonic aircraft dominate the $35 billion annual market and restoration of $60 million is recommended.

The high-speed civil transport could create between 300,000 and 500,000 jobs to the Nation who is poised to take this initiative. The potential for rotorcraft technology is being recognized in Europe and Japan and we need to continue our research. The national aerospace plane restructure contractor team should help meet future competition.

We admire NASA's commitment to continuously improve their facilities and personnel. The benefits of the space exploration initiative cannot possibly be predicted, but history tells us that whenever a new frontier has been opened, the benefits have been profound.

Space Station Freedom is transitioning to its hardware phase and must be supported to preclude further loss of capability. We applaud NASA's strong advanced launch system propulsion research effort, but substantial Federal support of a vehicle family, perhaps renamed America's launch system, is required. I have been to Kourou and have seen the construction and commitment of the French.

Multiyear approval for space science programs is needed to provide fiscal stability to projects measured in decades rather than years. The centers for commercial development of space will prove themselves for encouraging private investment in commercial space.

The first step of Mission to Planet Earth, the Earth observing system, is too important to curtail.

In conclusion, aggressive past investments in technology have led to our current position of leadership and can pay even greater dividends in the future. I respectfully request unanimous consent to include my entire statement in the record.

Senator **Mikulski**. That was a very robust delivery, Mr. Durocher.

[The statement follows:]

STATEMENT OF CORT DUROCHER

The American Institute of Aeronautics and Astronautics (AIAA) thanks you for the opportunity to present our views on the FY91 NASA budget proposal. We believe the administration's proposed budget is superbly designed to meet the diverse needs of a vital and exciting U.S. civil aeronautics and space program, and we urge you to support it as strongly as possible.

The AIAA is a nonprofit professional society dedicated to advancing the art, science, and technology of aeronautics and astronautics and to promoting the professionalism of those engaged in these pursuits. Our membership of over 44,000 professionals is drawn from all levels of American industry, academia, private research organizations, and government as well as from similar sources abroad.

Space

The AIAA has always emphasized that a well-balanced and vigorous civil space program is key to advancing U.S. science and technology and to improving our economic competitiveness. Investments in civil space help maintain our economic, political, and scientific leadership in the modern world. Maintaining pre-eminence is doubly important today, in view of the changes now taking place in the world. Glasnost and the political changes it has wrought make the U.S. civil space program even more important as a key ingredient in foreign policy. Moreover, the rapid growth in space capabilities overseas means that if the U.S. does not make the commitment needed for world leadership, others will.

Nevertheless, we recognize that pressures to reduce the deficit encourage Congress to compromise the pursuit of a vigorous civil space program and therefore trade away long-term paybacks in return for illusory short-term gains. In considering such compromises, we urge, as in past years, that you be guided by three basic principles:

- The space technology base is the foundation on which all future space activities and capabilities depend. Support for that base must not be allowed to decay, even though much of its payoff will come in the future.

- Completion of current programs, both in science and infrastructure development, should take precedence over the introduction of new programs. Once approved and initiated, programs should be completed on schedule. Program delays and stretchouts always increase costs, reduce system capability, and debilitate human motivation.

- Cutbacks in advanced research, technology, and development spending must be avoided if they will result in substantially higher development or operations costs later. While lower front-end costs may seem attractive in an austere budget environment, planning objectives must focus on minimizing overall life-cycle costs.

Our comments on several specific elements of the Administration's FY 1991 NASA budget proposal are as follows:

Space Exploration Initiative. The Space Exploration Initiative is an essential step in expanding human presence in the Universe, bringing humanity the cornucopia of benefits that have, historically, always accrued from the opening of new frontiers.

It is difficult to justify programs like the SEI in strict cost-accounting terms. We cannot possibly predict the benefits that may accrue from any specific program of exploration and discovery, but history tells us that whenever a new frontier has been opened to mankind by the process of exploration the benefits have been profound -- sociologically, scientifically, economically, and politically. The SEI responds to mankind's basic need to explore, gives us the experience needed to learn how to travel and work in this new realm, stimulates the scientific and engineering curiosity of a generation of students, and opens new opportunities for peaceful international cooperation.

Space Station Freedom. The Space Station Freedom is transitioning to its hardware phase, and must be supported at the proposed level to preclude further loss of capability, growth in life-cycle cost, and international friction. Freedom will serve as a testing ground for the development of technologies for human exploration and provide invaluable data on the long-term effects of low gravity on humans. Because it is an unprecedented international effort, Space Station Freedom will do more than demonstrate the peaceful uses of space; it will provide a foundation for undertaking future international elements of the SEI. Freedom will also help restore U.S. leadership in space, provide a source of national pride, inspire our youth, and strengthen our international alliances.

Space Shuttle. Demands on the Space Shuttle will exceed its capacity in the late 1990s, particularly in view of the finite probability of losing one or more Orbiters during that time. Support for replacement Orbiters and both enhancements and backups for the Shuttle are needed.

Next-Generation Launch Needs. Maximum attention should be given to next-generation launch needs. Aggregating the military, civil, and commercial payload market justifies a major government investment in developing an Advanced Launch System (ALS, a lower-cost, reliable, robust family of vehicles to meet those needs), and propulsion-system development is the first step in that process. The AIAA applauds the appearance in NASA's FY91 budget proposal of a strong ALS propulsion research and development effort, but urges a long-term *national* commitment to the integration of that propulsion work into development of the ALS vehicle family. We use the term "national" because the revised launch requirements of the Department of Defense may not support the high ALS development cost, but the *aggregated* requirements of both the DoD *and* NASA, with the SEI in mind, would certainly justify that cost. Indeed, with substantial federal R&D support of an ALS vehicle family (perhaps renamed "America's Launch System"), our nascent commercial launch industry, by building and marketing the launch services of such a vehicle family after it has been developed by the government, would find itself able to compete for next-generation large payloads against the European-government-supported Ariane 5 and perhaps even Soviet launchers.

Interim needs for heavy-lift capability might be met by Shuttle-C. Besides its projected use to support Space Station deployment and the early phases of the Space Exploration Initiative, Shuttle-C could also serve as a flight-test vehicle for both the ASRM and the LRB, and particularly for the new low-cost reliable engine now being developed for multiple use in potential ALS core and booster configurations.

It is also necessary to look beyond the Shuttle and even ALS technologies toward future cost-effective, reliable space transportation systems. Hence the AIAA applauds the strong budgetary support proposed by the administration for the joint NASA/DoD hypersonic National Aerospace Plane.

Space Science Program. The proposed space science program is superbly balanced and should be supported strongly. The AIAA endorses a long-term program of space science missions of the type proposed by the National Academy of Sciences' Space Studies Board and adopted by NASA's Office of Space Science and Applications. Such long-term programs cannot be carried out effectively, however, when their budgets are subject to annual change. Multiyear commitments for space science programs are needed to provide the fiscal stability commensurate with projects measured in decades rather than years. We therefore urge you to consider multi-year budgetary commitments for the Space Studies Board's excellent program.

Commercial Space Development. The proposed commercial space development program, which includes funding to fly experiments in both suborbital and Shuttle-borne orbital facilities until Freedom or other dedicated platforms become available, is an excellent step forward. The AIAA supports NASA's creation and support of Centers for the Commercial Development of Space (CCDSs) to conduct research aimed at the identification of potential commercial projects. We expect these consortia of government, universities, and industry to prove themselves as one of the better mechanisms for encouraging investment of private capital in commercial space development, but they should not detract from the important Space System Development Agreement (SSDA) program, which has already proved so helpful in capital formation for such organizations as GEOSTAR and SPACEHAB.

Space technology. Space technology is the foundation on which all our space programs rest. The Civil Space Technology Initiative (CSTI) and the Exploration Technology (formerly Pathfinder) programs cannot be trimmed without prejudicing virtually all our future goals and increasing long-term life-cycle costs. They represent NASA's effort to replenish the technology "bank" we have been depleting for the past two decades. There is no hope for pursuing major space exploration goals without firm, consistent commitments to these technology efforts. We deplore the cuts made in the past two years' Exploration Technology Program budgets, and urge you to support both CSTI and Exploration Technology this year, along with other cutting-edge technology advancements such as those needed for ALS, for Freedom's laboratory facilities, and for materials processing.

Earth Observing System. The first step in Mission to Planet Earth, the Earth Observing System, is a long-awaited new start. It is too important to the nation's future to curtail.

Future Technical Manpower. If these aggressive long-term space programs are to be carried out professionally and effectively, a new generation of skilled, dedicated scientists and engineers must be developed. It is not too soon to begin that process; other nations are far in the lead here. The U.S. is threatened with becoming technologically illiterate in an increasingly technology-dependent world. Programs like NASA's Designated Space Grant Colleges/Consortia and the federal Head Start Program will help to ensure that our nation's most vital resource, trained and motivated human capital, is not eroded.

Aeronautics

For several years the National Aeronautics and Space Administration (NASA) has struggled with the problem of stretching very limited research and tech nology funding across a large number of aeronautical technology disciplines –all of which have large potential payoffs. Compounding the problem is the need to refurbish, modernize, and maintain the valuable wind tunnel, simulation, computer and flight test facilities operated by NASA.

The total NASA aeronautics budget of $935 million for FY'91 is approximately 1.5% of United States aircraft sales booked in 1988 and not commensurate with the potential aircraft sales projected for the aircraft industry in the future. The 1988 aerospace exports were $26.9 billion of which $20.3 billion were in the civil market –this represented 8.7% of the total dollar value of all United States exports. The industry recorded a record trade surplus of $18 billion.

The $512 million research and technology funding is less than 3.5% of the total NASA budget. Although there is a modest increase over last year, the need has clearly increased significantly. At the same time, we find greatly increased emphasis from the Europeans and the Japanese in all flight regimes that were highlighted in the Office of Science and Technology Policy *Aeronautical Research and Development Goals* report of 1987.

The American Institute of Aeronautics and Astronautics (AIAA) Aeronautical Advisory committee reviewed the NASA aeronautics budget over a two day period in February 1990. The committee selected each of the areas discussed below for specific mention:

Flight Research. Flight systems Research and Technology (R&T) funding of $40.0 million is low when one considers the potential beneficial results of testing the X-29, F-18, F-15, F-16XL, and now the SR-71 aircraft. Experimental aircraft and test vehicles frequently serve to bring together evolving technology for the purpose of demonstrating their viability in the environment in which they will be utilized. A vigorous flight research and technology program is essential to maintaining a strong national defense, as well as providing a favorable effect on the balance of payments because it enables technologies to be brought to a more mature level of readiness and enables technological risk to be identified and closed early. Analysis and simulation methods are very useful in the development of new manned and unmanned aircraft; however they are highly inadequate for the full design and development task, especially when use of advanced technology results in large uncertainties.

Advanced Subsonic Technology and Safety Integration. Subsonic aircraft dominate the world aerospace market, exceeding $35 billion total annual sales by US manufacturers alone, and are expected to remain the largest aerospace market well into the next century. In FY'91 NASA had planned a major thrust, originally at the $60 million level, to design and enhance our subsonic technology capabilities. It was to be a multi-year effort characterized to assure continued leadership in future civil aviation markets. This project was targeted at the enormous near-future transport market and consisted of subsonic aircraft similar to those now in production and constantly being improved. Because of budgetary pressures, the program was zeroed out by the Office of Management and Budget. The AIAA recommends the restoration of the $60 million funding for FY91 and the necessary funding required to complete the program. As our civil aircraft fleet continues to age, research is needed to define new methods of non-destructive examination and to determine the environmental effects on metallic and non-metallic structures.

Manufacturing Technology. Substantial investment in manufacturing technology is needed. There is a significant potential for reducing the system development cycle time, improving overall efficiency of production with increased quality, reduction of system costs, and major improvements in system, safety.

High Speed Civil Transport Technology. Worldwide pressure for the development of an economically-viable advanced High Speed Civil Transport (HSCT) over the next few years has grown significantly in 1989. Results of system studies performed under counteract for NASA indicate that a 1000 unit HSCT production program would add $400 to $600 billion dollars to the United States GNP over the life of the program, thus improving the balance of trade between 60 and 175 billion dollars and create between 300,000 and 500,000 jobs, depending on the US production percent.

An HSCT is a logical product of technological advancement in aeronautical and system related sciences. The decision to initiate the detailed design and construction of a prototype HSCT will be based on consideration of the total cost –development, acquisition, and operation of the fleet– as well as of the passenger market and ticket costs. Environmental considerations are a key factor in the overall design requirements of the aircraft. They will have a large influence on the total program cost and, therefore, on the final decision to proceed with HSCT development. Advancing the technology base will lower the cost of the fleet, and it is a matter of time before those costs and the economics of the market reach a "critical mass" and prompt a decision to initiate a prototype design. The AIAA supports the HSCT program and urges its continued funding by the Congress.

Rotorcraft Systems Research and Technology. Rotorcraft offer high promise as a congestion reliever. They don't require the long runways of airports so they actually unload the runways of short haul traffic and consequently allow an existing airport to increase its capacity without costly upgrades and repairs. NASA needs to strengthen programs in the technical areas of handling qualities (taking advantage of new digital avionics), economical deicing of rotors (for all-weather operations), low air speed systems, improved cockpits to reduce pilot workload, and efforts to predict rotor aerodynamics. The use of composites in rotorcraft dynamic system components (blades, hubs, control and drive shafts) for improvement of damage tolerance and durability should be evaluated. Also, we believe NASA should play a significant role in improving the performance of the tilt-rotor concept. We need to continue the research and development effort currently underway in the V-22 program and augment that with NASA research to fully realize rotorcraft potential. This potential is being recognized in Europe and Japan. Wouldn't it be ironic if the United States, who invented and demonstrated the technology, had to buy its rotorcraft from Europe or Japan? We feel the $5.1 million in the NASA budget is extremely low for this important area of research and technology.

Materials and Structures. The FY'91 program funding of $41.4 million for Materials and Structures R&T is low when the potential benefits are considered. There is an immense potential for vehicle performance gains through the use of advanced materials in primary structures and in engine hot sections. In addition, there is a need for proper fracture and mechanics tests for validation and qualification of composites. "Damage" needs to be defined and the mechanism of damage formation and accumulation identified. Clearly, the potential benefit dictates the advisability of additional funding of this program area.

Concept and Systems Studies. The identification and assessment of long-term technology requirements can only be accomplished successfully by analytical investigations that explore alternate concepts and define overall sensitivities. A substantial budget increase is recommended for the systems analysis in the research and technology base budget. This program supports conceptual design studies of a broad range of aerospace vehicles, types and performance to determine technology deficiencies and the sensitivity of vehicle performance to emerging technologies. This information is used in developing research program plans, priorities, and resource investment.

National Aerospace Plane (NASP). The NASP offers to bring a number of critical technologies to a maturity that will permit the design and development of a technology demonstrator. The national capabilities being developed to support NASP and the technology being developed will insure that the United States retains global preeminence in hypersonics. We applaud the restructuring of the NASP program to align the schedule with a more realistic technology development. Also, the establishment of a multi-contractor focussed national team should help in meeting future competition from nations that have heavy government support.

Conclusion. There is a lag in the time required to develop superior products and attain payoffs from those products. A major thrust today may not yield significant dividends until the next century. The transport market aircraft market projected between 2000 and 2030 is $1.5 trillion in constant 1988 dollars. If our share of that market is reduced by 2% due to our underfunding of our technology efforts today, a billion dollar annual loss could realistically result. The recognition of a significant increase in foreign competition over the last five years should be a warning to us of a potential economic disaster. Aggressive past investments in technology programs have led to superior aircraft systems that are the source of our current position of leadership, and clearly they can pay even greater dividends in the future. We therefore strongly urge an increase in the FY'91 funding level for NASA aeronautics as a matter of economic necessity.

We thank you for this opportunity to present our views on the FY91 NASA budget proposal, and will be pleased to answer any questions you may have.

STATEMENT OF DR. RICHARD HOLT, AMERICAN ACADEMY OF OTOLARYNGOLOGY

LIFE SCIENCE BUDGET

Senator MIKULSKI. Dr. Holt?

Dr. HOLT. Yes. Good morning, Senator Mikulski.

Thank you for the opportunity to support NASA's life science budget this morning. I represent the American Academy of Otolaryngology, Head and Neck Surgery, which is a large group of physicians in academic and private practice who have, for many years, in fact since the inception of NASA, supported research in space biomedicine.

Today we feel it's quite important for NASA's life sciences budget to be supported for a number of reasons. Two of them I'd like to mention today.

First of all, it's important to recognize the fact that many of the disease processes that we see on Earth have some analogs in space.

That is, space motion sickness is related to balance disorders that affect millions of individuals in the United States.

The difficulty with bone resorption is not dissimilar to osteoporosis, which affects millions of women over the age of 40 each year. Solar radiation, which may be a limiting factor for manned space travel, is very similar to skin cancer, particularly in the South where exposure to the Sun causes the most common skin cancer.

We feel that these analogs to health care on Earth can be improved by the research that NASA has planned in these areas. We feel it's very important to support this testimony with real information, and I have submitted it for the record.

SPACE FLIGHT SAFETY

As Senator Robb mentioned in the Senate, this is the 50th year of the airborne soldier. As one who has jumped out of aircraft, flown high-performance aircraft in the service of my country, I join others in recognizing the fact that the astronaut corps and others in high-altitude endeavors have to rely upon medical personnel and scientists to make it as safe as possible.

While these are volunteer chores, the responsibility has always been in the hands of the medical professions and we now accept that responsibility with continued endeavor and vigor to make space flight as safe as possible for the astronaut.

Unfortunately, the space program may be limited by the fact that these problems have not been solved and the fact that human beings are still not capable, to our knowledge, of existing for long periods of time in microgravity without serious health difficulties. So, until these problems are addressed and NASA life sciences does have the wherewithal and the plans to address them, we feel that our space initiative may well be limited by these serious health effects.

Therefore, we, as physicians in the United States, encourage the committee to support NASA's life sciences budget.

Thank you.

Senator **Mikulski**. Thank you, Dr. Holt. Earlier, when I commented to Dr. Grindlay or issued the invitation to support amplifications and additions—all who testified are invited to do that.

Well, we think that one of the criteria we're going to use in this subcommittee as we go through this appropriations cycle, is to ask ourselves how should a superpower use its power? What was once perhaps military might, which we won't neglect, the power is in economics and in science.

So we look forward to working with you, trying to get a good budget and a good 302(b) allocation.

Thank you.

We're now going to move on to taking testimony regarding the National Science Foundation. We invite Dr. Alan Kraut, Dr. Rhoda Dorsey, Howard Silver, Robert Balster, and Pauline Brooks to participate in this panel.

We recognize that we're moving quickly. When others come in, they can—Dr. Dorsey, I thought you'd be out there with the Mills College kids.

Dr. **Dorsey**. I hope they've gone back to work.

Senator **Mikulski**. Dr. Dorsey, I know that you're here representing the National Association of Independent Colleges and Universities. Why don't you lead off the testimony.

National Science Foundation

STATEMENT OF RHODA M. DORSEY, PRESIDENT, GOUCHER COLLEGE

Dr. **Dorsey**. Thank you very much, Senator.

The National Association of Independent Colleges and Universities represents 850 independent institutions. Many of the members are small liberal arts colleges, like Goucher. These are teaching institutions and they prepare undergraduates in science and math and premed. We do this through fine teachers, through high standards, and through the opportunity for hands-on learning that is especially important in science.

ACADEMIC RESEARCH FACILITIES MODERNIZATION PROGRAM

We support the NSF programs for faculty, for students, for curriculum and for instrumentations, but particularly the Academic Research Facilities Modernization Program. You and I have spoken about this before, last summer and again last fall, with the other women college presidents in Maryland, and you know how important a program we think it is.

We were delighted when it was funded at $20 million. Of that $20 million, about $5 million was made available to what are called group III institutions. There are the institutions, the small colleges.

The program this year had 425 applications for funding of which 262 came from group III institutions, and 54 of those were historically black and minority institutions. This is an enormous reaction to a program, and it speaks to the excitement that the program created.

It also speaks to the huge unmet need that is still there. This program has been authorized for this year well above what the administration has asked for. We know that the NSF requested more from OMB but was rebuffed. We know that the House Space and Technology Committee has requested the larger sum.

I'm here to express the hope to you that your committee can provide considerably more money than the administration has requested and thank you again for your concern for the small teaching colleges, the minnows of the world, and the support you've given them in a program that is very important to them.

Thank you, Senator.

Senator **Mikulski**. Thank you, Dr. Dorsey.

[The statement follows:]

Statement of Rhoda M. Dorsey

Good morning, Mr. Chairman and members of the subcommittee. I am Rhoda Dorsey, president of Goucher College, located in Towson, Maryland. I appreciate this opportunity to present the views of my institution and those of the National Association of Independent Colleges and Universities (NAICU) concerning fiscal year 1991 appropriations for the National Science Foundation (NSF). NAICU represents approximately 850 independent colleges and universities, including large research institutions, faith-related colleges, liberal arts colleges, historically black colleges and universities, two-year junior colleges, and specialized colleges of various types.

Of the many responsibilities that have been assigned to the NSF, none is more important than its role in helping the country meet its need for scientists and engineers. There is well-founded concern that by the year 2000, the nation will be facing a serious shortage in the number of science and engineering Ph.D.s that it is producing. It has been predicted that this shortfall could grow to 7,500 per year by the beginning of the next decade.

Fortunately, much attention has been focused on how we can address these impending shortages. First, and most critical, is the understanding that interest in science is developed at an early age, and that this interest must be encouraged from these early years through the graduate school experience. A 1987 report by the National Academy of Sciences says it well, "Every educational and developmental stage is a potential point of intervention, and a comprehensive approach to nurturing science and engineering talent must address the whole pipeline."

NAICU is proud of the contributions that its member institutions, such as Goucher, make to the scientific pipeline by educating individuals who go on to pursue Ph.D.s in science and engineering. When ranked in terms of the percentage of their undergraduates who later earn science and engineering Ph.D.s, almost 90 percent—35 of the top 40 colleges and universities—are private institutions, and 19 of the top 40 colleges and universities are small private liberal arts colleges such as Haverford, Grinnell and Pomona. The intensive interaction that students have with faculty at these types of colleges, and the emphasis that these schools place on teaching are significant factors in creating the high level of interest in science careers. These colleges include women's colleges and traditionally black colleges as well as other private liberal arts institutions.

According to the Office of Technology Assessment report, "Educating Scientists and Engineers," "Small liberal arts colleges with some active research produce, in relation to their size, a remarkable number of students who eventually earn Ph.D.s in science and engineering." The report adds that there is a great need "to pay more attention to the quality of undergraduate programs—the extent of interaction between students and senior faculty, the balance between curricula designed to weed students out and curricula designed to nurture students along, and the availability of undergraduate research experiences."

NAICU strongly endorses the administration's fiscal year 1991 budget request of $463 million for the NSF's education and human resources programs. We applaud the fact that these programs are slated to comprise 20 percent of NSF's budget by fiscal year 1991, compared to the extremely low level of three percent in fiscal year 1982. In particular, we support the almost $134 million that NSF is requesting for undergraduate programs; this is a $44 million, or 48 percent increase over last year's level. These programs span much of NSF's activities and include support for student research, faculty enhancement, course and curriculum development, and instructional instrumentation and laboratory development. Although many of these grants are relatively small, they can have an enormous impact on students on our campuses, and can draw young scholars into science careers by giving them the opportunity to practice science using the latest equipment and methodology.

We also support the administration's request for $94 million for special programs for minority institutions, minority women, and disabled students. The future vitality of our nation's science and technological activities will hinge in a large part on our ability to draw more women, blacks, Hispanics, and disabled persons into science and engineering careers.

NAICU also endorses the administration's request of $1.954 billion for NSF's research and related activities. The bulk of this request is to support individual investigator research projects. These projects comprise 70 percent of the research and related activities budget, and remain an essential component of NSF's activities.

Finally, I would like to address the issue of facilities. Last year, this subcommittee responded to the urgent request from NAICU's membership and many other institutions of higher education to begin to provide the necessary funds to bring college and university science facilities up-to-date. The subcommittee funded the Academic Research Facilities Modernization Program at $20 million, and fought to retain that funding in conference. The actions of this subcommittee were heroic, since the administration had not requested funding for this new program, nor had the House included an appropriation in its fiscal year 1990 VA-HUD-Independent Agencies appropriations bill. The conventional wisdom in Washington is that new programs—no matter how worthy—are not viable. But this subcommittee's actions defied the conventional wisdom.

The response to the NSF's initial solicitation for applications for this program was overwhelming: 425 Phase I applications were submitted, requesting a total of $318 million. Two hundred sixty-two institutions in the Group III category of applicants (those with NSF support averaging less than $400,000 annually), submitted requests for what may be less than $5 million in funding. Fifty-four historically black colleges and universities and minority institutions submitted applications. The NSF convened review panels on April 1, and Phase II proposals are to be submitted by June 15.

After so many years of federal neglect in the facilities area, the establishment and funding of a competitive grant program for science facilities, however inadequately funded, created enormous excitement on our campuses. This huge response to NSF's first solicitation of applications for its renovation program gave further evidence of the critical need that exists for direct federal support in this area. I will not devote much time here to recapitulating estimates of the staggering unmet need to upgrade this nation's academic science facilities, but I would like to mention a survey conducted last year by the National Institute of Independent Colleges and Universities which showed that in the independent sector alone, the estimated funding required to improve science facilities over the next three years was $1.6 billion, with $1.2 billion needed for construction and $400 million needed for repair and renovation.

For these reasons, NAICU supports a substantial increase over the $20 million that the administration has requested for the research facilities modernization program next year. We believe that the linkage that exists on our campuses between up-to-date science facilities and our ability to draw top-notch faculty and capture the imaginations of potential science and engineering majors justifies such an increase. The administration's budget request is unaccountably small in relation to NSF's own documentation of aggregate need in this area. Because we strongly support the administration's request for research and education, we urge you to provide additional funding for facilities.

The White House Science Council's Panel on the Health of U.S. Colleges and Universities concluded in 1986 that a ten-year federal commitment of $500 million a year was "the necessary minimum program scope" to restore the infrastructure of academic research. In addition, it is widely known that the NSF originally requested far more than $20 million for this program in its original budget submission to the Office of Management and Budget, but that the request was rejected. We hope that the subcommittee will consider funding at $149 million over the president's request. This amount constitutes the increase needed to attain the level of $188 million authorized under the Academic Research Facilities Modernization Program for fiscal year 1991. Our proposal is consistent with the "views and estimates" recommended by the House Committee on Science, Space, and Technology for the 1991 budget. A significant increase is both needed and possible. We should not lose the momentum and enthusiasm that has been generated, nor be intimidated by all that remains to be done.

NAICU's members are proud of the role they play in advancing the scientific and technological capacity of this nation. The support that they receive from NSF helps them to achieve this important goal. We hope that you will consider our views as you make your funding decisions for the next fiscal year.

I thank you for all that this subcommittee's foresight and courage has meant to our students, and for your courtesy in allowing me to present this testimony today on behalf of Goucher College and NAICU member colleges and universities.

STATEMENT OF DR. HOWARD J. SILVER, EXECUTIVE DIRECTOR, CONSORTIUM OF SOCIAL SCIENCE ASSOCIATIONS

Senator **Mikulski**. Now we'd like to turn to Mr. Howard Silver, representing the Consortium of Social Science Associations.

Dr. **Silver**. Good morning, Madam Chair. As a former professor of political science at Washington College, and somebody who spent a while learning the great State of Maryland from Highlandtown to Hagerstown, running around with a fellow named Ted Venitoulas a while ago, it's a pleasure to be here this morning.

RESEARCH AND RELATED ACTIVITIES

I come today as the executive director of COSSA, which represents more than 185,000 American scientists who study the social and behavioral sciences. I come to ask you to fund the National Science Foundation at its full request level, more importantly, to fund the research and related activities account at its full request level.

As you know, the core disciplinary subjects supported by NSF still face a difficult problem in terms of its funding and the social sciences is an example. In fiscal 1980 NSF was spending $31.3 million, in fiscal 1989 they were spending $30.9 million supporting our disciplines. We also ask, as I suspect you will do, that the increase for science and engineering education not come at the expense of research and related activities account.

SCIENCE ED

A word about science ed. The assessments of our Nation's current students who will be the U.S. work force of tomorrow demonstrate that the crisis situation is not just in the physical and natural sciences. The Nation's students are not just scientifically and mathematically uneducated, they are geographically ignorant, economically ignorant, and they do not understand how the U.S. political system works beyond a simple description of its institutions.

A better technologically educated society is only one part of the equation for taking America into the 21st century world economy. Our students, in order to compete in that international economy, need knowledge of not just the physical and natural sciences and engineering, they must learn economics to understand international trade, anthropology to understand other cultures, political science and sociology to understand international political and social systems, and psychology to understand basic human behavior. They should not have to wait until college to learn these subjects.

A number of efforts to enhance science ed, including Project 2061 sponsored by the AAAS, have recognized the importance of integrating the social and behavioral sciences into the precollege science curriculum. We ask the subcommittee to call on NSF to do the same.

The social sciences, as Presidential Science Advisor Allan Bromley said, become very important to the issue of global environmental change. We are very involved in an integrated program studying the human dimensions of global environmental change supported by NSF. We are also involved in other aspects of global change, including the remarkable events occurring in Eastern Europe and the Soviet Union. NSF is supporting some of our people currently who are in Eastern Europe and Poland and Hungary and the Soviet Union who are looking at what's going on in those countries.

Let me finish by saying we appreciate your past support for NSF and our disciplines and we ask you to fully fund the research request this year.

Thank you.

Senator MIKULSKI. Thank you, Dr. Silver.

[The statement follows:]

JOINT STATEMENT OF HOWARD J. SILVER

Madame Chairman and Members of the Subcommittee:

I am Howard J. Silver, Executive Director, of the Consortium of Social Science Associations (COSSA). COSSA represents more than 185,000 American scientists across the full range of the social and behavioral science disciplines, functioning as a bridge between the research world and the Washington community. A list of COSSA Member associations, Affiliated societies, and Contributor institutions is attached.

COSSA would like to take this opportunity to express our appreciation for the Subcommittee's past support for the social and behavioral science disciplines at the National Science Foundation (NSF), and for the continued support of individual investigator initiated research projects. What follows are comments on the proposed FY 1991 budget for the NSF and the importance of social and behavioral science research at that agency.

As a member of the steering committee of the Coalition for National Science Funding (CNSF) we strongly endorse the funding recommendations in the brochure At the Frontiers of Science and Technology. The $261 million increase for NSF recommended by the President's FY 1991 budget is a must to keep the Foundation on its new doubling track -- a goal enunciated by both Presidents Reagan and Bush and endorsed by the Congress in the NSF authorization bill passed by the Senate 88-1 in FY 1988. The authorized figure for FY 1991 of $2.78 billion is necessary to fund all the important work that could be supported by NSF.

For COSSA the most important action this Subcommittee can take on the FY 1991 NSF budget is to maintain the proposed figure of $1.954 billion for research and related activities. As the CNSF brochure notes almost two-thirds of the core disciplinary programs at the Foundation are, in real terms, below their FY 1988 funding levels.

By appropriating at the requested level for research funding, the NSF will not have to reduce the proposed increases for the social and behavioral sciences. Those increases of $3.2 million for the social and economic science division and $2.3 million for the behavioral programs of the behavioral and neural science division are still considerably below the proposed increases for other disciplinary research programs in the Biological, Behavioral and Social Science Directorate at NSF. To force a reduction in the NSF research request will result in even smaller increases. Above all else, we urge the Subcommittee to help avoid another sequestration.

I suspect the Congress, as it has done in the past, will consider increasing the funding request for Science and Engineering Education at NSF. COSSA does not have any problem with that, unless a zero-sum game is played and these increases come at the expense of the Research and Related Appropriation.

Increasing support for science education is important. However, it is apparent that NSF and many others neglect to include the social and behavioral sciences when describing the science education problem in this country. NSF's summer workshops on undergraduate curriculum reform omitted the social and behavioral sciences altogether. Yet, assessments of our nation's current students, who will be the U.S. workforce of tomorrow, demonstrate that the crisis situation is not just in the physical and natural sciences. The nation's students are not just scientifically and mathematically uneducated, they are geographically ignorant, economically ignorant, and they do not understand how the U.S. political system works beyond simple description of its institutions.

A better technologically educated society is only one part of the equation for taking America into the twentieth first century world economy. As well as training good scientists, the U.S. must train good citizens. Our students, in order to compete in the international economy, need knowledge of not just the physical and natural sciences and engineering. They must learn economics to understand international trade, anthropology to understand other cultures, political science and sociology to understand international political and social systems, and psychology to understand basic human behavior. And they should not have to wait until college to learn these subjects.

A number of efforts to enhance science education, including Project 2061 sponsored by the American Association for the Advancement of Science, have recognized the importance of integrating the social and behavioral sciences into the pre-college science curriculum. We ask the Subcommittee to call on the NSF to that as well, by encouraging the participation of social and behavioral scientists in all their pre-college and undergraduate science education programs and activities. The education reforms proliferating throughout the country and the leadership role for the NSF in those efforts need to include all fields supported by the Foundation.

Science education is admittedly a disaster, but so are many other aspects of our education system. The studies of the National Assessment of Educational Progress (NAEP) seem to indicate that the back-to-basics movement, popular in education reform circles in the 1980s, has worked to some extent. What we need now, the NAEP results demonstrate, is to teach higher-order thinking and cognitive skills. The research and training provided by social and behavioral scientists who study cognition, learning theory, and communication theory, provide the information to help students acquire these advanced skills necessary to live and compete in the twenty-first century.

Attracting students from minority backgrounds into science will contribute to the health of this country and end a significant waste of human resource potential. Yet, the recent report of the Committee on the NSF Role in Attracting Minorities to Careers in Science and Engineering focused only on the natural sciences and engineering. Many believe that the social and behavioral sciences are fields where blacks and other minorities have prospered, compared to the natural and physical sciences. This view, which treats the social and behavioral sciences as one discipline, masks marked differences that should not be overlooked. For example, according to the NSF report Profiles -- Economics: Human Resources and Funding (NSF 88-333) only 3.2 percent of employed economists are black, below the rate for mathematical scientists and computer specialists. Almost all of the social and behavioral science disciplinary associations are making special efforts to recruit minorities into graduate programs and the professoriate.

In the past few years NSF has become a major player in the U.S. Global Change Research Program devised by the federal interagency Committee on Earth Sciences. For FY 1991 it will receive over $100 million out of a proposed $1 billion government-wide effort. In two recent speeches, Dr. D. Allan Bromley, Assistant to the President for Science and Technology, and Director of OSTP, has voiced support for the significant role research in the social sciences will play in the global environmental change program. Speaking at the National Press Club on April 11, he stated: "In general, the social sciences will be as important as the natural sciences in improving our understanding of global change. Even when the physical and biological aspects of a problem are understood, all too often agreement is lacking on the underlying social, behavioral, and economic causes and consequences of an action."

At the recent White House Conference on Science and Economics Research Related to Global Change, both Bromley and Council of Economic Advisers Chairman Michael Boskin made clear that global change research will not be left to the physical and natural sciences. Bromley noted that "the behavior of human beings, economically and politically, will be a major determinant of future changes in the environment." The social and behavioral sciences have become part of an integrated, multi-disciplinary research agenda on global environmental change.Despite all this rhetoric, only $15 million will be allocated to research on the human dimensions of global environmental change. Of that total, the NSF is slated to receive $5.5 million in FY 1991.

Global Change does not involve just changes in the physical environment. The remarkable events of the past year have pushed research agendas in many different directions. Fundamental processes of social and economic change are occurring on a global basis. For example, the growing internationalization of finance and production, the rise of transnational ethnic movements, population and labor flows across national boundaries, global religious fundamentalism, and the internationalization of popular culture are all creating vast arenas for research. In the early summer an international workshop will be held with NSF sponsorship to explore the sociolegal aspects of global change in commercial and economic transactions, population, crime and conflict, governance, and the environment.

In addition, NSF has begun to support interdisciplinary research training groups where social and behavioral scientists interested in global change will interact with natural and physical scientists to better understand each other's subjects and approaches to research. These groups need enhanced support.

NSF is also supporting research on global change through its Small Grants for Exploratory Research (SGER) program that began as an experiment in the engineering directorate, but has now expanded to include all programs within the Foundation. This program provides small discretionary grants of up to $50,000 for short-term, exploratory research. Currently, a number of social scientists are examining the remarkable changes occurring in Eastern Europe and the Soviet Union. In particular, they are conducting research on attitudes toward political participation, political parties, and other aspects of democratization. Surveys utilizing questions from the US National Election Studies, long-supported by NSF, are testing attitudes toward political change in the Soviet Union and Hungary.

NSF continues to support the National Center for Geographic Information and Analysis (NCGIA), a consortium of scientists at the University of California at Santa Barbara, the State University of New York at Buffalo, and the University of Maine. The development of Geographic Information Systems (GIS) has been significant for urban and municipal planning in streamlining governments and improving service delivery. An article in the December 1989 issue of "GOVERNING: The States and Localities" notes how these 'maps with brains' are transforming governments as they are applied to optimizing school-bus routes, deciding on sites for fire stations and other emergency services, and mapping the outbreak of diseases. Los Angeles is developing a GIS system to help with earthquake analysis. At a COSSA sponsored congressional breakfast seminar last year, Prof. David Cowen, Director of the Social Science Research Laboratory at the University of South Carolina, described the statewide GIS being developed to enhance economic development in his State, and which will also help local governments make decisions about roads, water and sewer projects, and other public works.

This year's budget proposal also includes $1 million for support to initiate social science research in the Arctic. This funding proposal comes in response to recommendations by the Congress, the National Science Board, the National Academy of Sciences, and the Interagency Arctic Research Policy Committee.

These recent special initiatives have led to the small increases that have occurred for the social and behavioral sciences at NSF. However, it is still worth noting that in FY 1989 the programs of the social and economic science division spent $30.9 million; in FY 1980, they spent $31.3 million. The core disciplinary programs are still suffering. Most have seen their funding levels remain stagnant during the past ten years.

As an example, the political science program has not received a significant funding increase for many years. As Nobel Laureate Herb Simon told the Senate Commerce Committee last Fall, "[Political science research] can help us know ourselves as citizens and actors in the political arena; can provide the realistic knowledge of ourselves that is essential if we are to preserve and improve democratic institutions that are the foundation of our national life. Surely that knowledge repays many time the small investment -- a few million dollars at most -- that the federal government makes each year in basic research in political science."

In addition, NSF continues to support the multi-user large data-bases such as the Panel Study on Income Dynamics, the National Election Studies, and the General Social Survey, that serve as important sources of data for numerous research and dissertation studies that provide information about many public policy issues. With NSF support over the years the Inter-University Consortium for Political and Social Research has become a model for data storage and sharing. In many ways, it was the social sciences that encouraged the Foundation wide data sharing initiative now in place. The large data bases and their supporting institutions must remain on the NSF funding agenda.

NSF research support is very important to social and behavioral scientists. It provides almost one-third of all federal research support for these disciplines. In the areas of anthropology and political science it is supporting virtually all academically-based research. Because of the lack of significant funding increases for the social and behavioral sciences at NSF during the past ten years, scientists in the field are getting restless. At a recent meeting a task force recommended to the BBS Advisory Committee that consideration be given to creation of a separate directorate for the social and behavioral sciences. This represents a clear feeling that the current structure of NSF has not provided sufficient resources to conduct the important basic research in the social and behavioral sciences.

COSSA urges you to support the research funding request.

Thank you for the opportunity to present our views.

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Society for Research on Adolescence
Society for Research in Child Development
Society for the Scientific Study of Religion
Southern Sociological Society
Southwestern Social Science Association
Speech Communication Association
The Institute for Management Sciences

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STATEMENT OF PAULINE H. BROOKS, ASSISTANT VICE PRESIDENT FOR PUBLIC TELEVISION, CHILDREN'S TELEVISION WORKSHOP

Senator **Mikulski**. We'd now like to hear from Pauline Brooks of the Children's Television Workshop that has a long record of developing programmatic content for children in the area of science and other exploratory thinking.

Ms. **Brooks**. Thank you.

I'm Pauline Brooks from Children's Television Workshop. I'm very pleased to be here today to have the opportunity to urge this subcommittee to support the work of the National Science Foundation and, in particular, the Division of Materials Development and Informal Science Education.

"SQUARE ONE TV" AND "3-2-1 CONTACT"

I also ask you to urge the NSF to continue its strong support of two of Children's Television Workshop's educational television series—namely, "Square One TV," about mathematics, and "3-2-1 Contact," about science—both targeted toward children 8 to 12 years old. In a typical week these two series bring an extra hour of science and math education to more than 4 million households with children under 12, and at the cost of only pennies per viewing, far cheaper than almost any other educational innovation.

To give you an example of the power and accomplishment of NSF's commitment to "3-2-1 Contact," a survey showed that 50 percent of children who viewed the program actually do go out afterward and get involved in a science-related activity, such as trying an experiment, looking up information in the library or visiting a science museum.

As for "Square One TV," recent research found that children who watch the series regularly improve significantly in their ability to solve unfamiliar math problems and this improvement was evident, regardless of the children's socioeconomic background, ethnicity, or gender. Our viewer mail tells us how much children like "Square One TV."

For example, Anna Belle Sirota wrote to tell us that when she was teaching fourth and fifth graders in southwest Baltimore, the series was so popular that she held a weekly schoolwide math contest based on the previous day's "Square One" program.

Madam Chair, for a long time NSF has had the foresight to champion television and related technologies as valuable tools for educating our children. Please ensure that NSF's important contribution to education continues and also ask the NSF to continue its support for "3-2-1 Contact" and "Square One TV."

Thank you very much, Madam Chair.

Senator **Mikulski**. Thank you, Ms. Brooks, and thanks for the little story about southwest Baltimore.

Ms. **Brooks**. Well, I was hoping you'd like that one.

Senator **Mikulski**. I notice the advocates for the NSF have brought in a Maryland team here, which I might add doesn't look like the Orioles but knows how to score homeruns. [Laughter.]

[The statement follows:]

STATEMENT OF PAULINE H. BROOKS

Thank you for the opportunity to appear before you today. I am Pauline Brooks, Assistant Vice President for Public Television of Children's Television Workshop, and I am here to support the work of the National Science Foundation. Specifically, I want to ask you to provide adequate funding for the NSF's Materials Development and Informal Science Education Division, and to urge the NSF to continue its strong support of CTW's mathematics series, Square One TV, and our science series, 3-2-1 Contact. The NSF has made multi-year funding commitments to both series since their inception, and is largely responsible for their existence.

Children's Television Workshop is a multimedia educational institution. We have a mission: to use mass communications to educate young people, mostly outside the classroom, but in school as well. We believe that CTW's emphasis on informal education is completely congruent with the six national goals for education, to be met by the year 2000, that the President outlined last January in his State of the Union message. These goals were developed in conjunction with the Governors' Task Force on Education, co-chaired by Governors Bill Clinton of Arkansas and Carroll Campbell Jr. of South Carolina. Two of the President's and the Governors' national goals directly address mathematics and science education.

Thanks to early, consistent and long-term funding from the National Science Foundation, CTW has become a leader in informal education in mathematics and science. For the past ten years, the NSF has been the lead funder of 3-2-1 Contact, our science and technology series for eight to twelve year olds. 3-2-1 Contact, CTW's longest running series after Sesame Street, has been broadcast on public television since 1980. It was designed both for home viewing preferably for children to watch along with their parents. 3-2-1 Contact was meant to provide its young audience, especially girls and minority children, with informal education in science: its primary goals were to stimulate youngsters' interest in science by communicating the joy of scientific work, and by presenting scientists as attractive and accessible role models. The series encourages children's natural curiosity and tries to broaden their understanding of science by showing them that science is everywhere. Many children write or call us because they want to use something they saw on 3-2-1 Contact as the basis of a school science project, and we make Teacher Guides available to help teachers use the series in the classroom.

Thanks in part to NSF, we also have been able to verify how well 3-2-1 Contact works. In 1987, NSF commissioned a study of home viewers of 3-2-1 Contact to determine the impact of the series. Among the study's findings were the following: Girls watch as often as boys and minority children watch as often as white children; 50 percent of viewers engage in some science-related activity, such as reading about a scientific subject, trying an experiment or solving a problem, or discussing the program with another family member.

At present, 3-2-1 Contact appears on public television in rebroadcasts, continuing to reach during an average week 1.4 million households with a child under 12. Last year, NSF provided additional funding to extend the series in two important ways. First, 3-2-1 Contact will continue to be rebroadcast for the next five years. Second, this funding has enabled us to begin producing five 3-2-1 Contact prime-time specials, which we call extras. These extras generate additional publicity and critical attention that calls attention to 3-2-1 Contact itself as a long-running series. Our most recent extra, "The Rotten Truth," about this country's waste disposal problem, earned an unprecedented response from children, parents, and teachers.

In June, NSF will be considering a proposal for 3-2-1 Contact which will allow us to repackage and distribute 3-2-1 Contact for use in classrooms, as well as in after school, community, and child care programs. NSF funding has enabled us to research schools and the burgeoning child care market, and to determine how and what kind of retailored, multimedia 3-2-1 Contact package of video and print materials could serve the growing need for educational materials in these settings. We ask you to encourage NSF to support this ongoing project, which will extent the life of the series and considerably leverage NSF's original investment.

Since 1987, multi-year funding from NSF also has enabled us to produce Square One TV, our mathematics series that is now in its third season on national public television. For the last three years, Square One TV, designed for eight- to twelve-year-olds to view at home, has been making an important and effective contribution to the national battle against innumeracy. Thanks to NSF support, it will appear for a fourth and fifth season.

Since the series' inception, there has been ample and dramatic evidence that children do learn from Square One TV. Most recently, the results of an important new study in Corpus Christi, Texas, has found that: Children who viewed Square One TV in a sustained manner showed significant improvement in their ability to solve unfamiliar, complex mathematical problems; Through exposure to the series, children improved their problem-solving ability regardless of their socioeconomic background, ethnicity, or gender.

This study also has gathered some preliminary evidence that children come to mathematics classes with more enthusiasm after watching Square One TV.

We know this is true because of the letters we receive from young viewers, their parents, and their teachers. When Anna Belle Sirota was teaching remedial mathematics to fourth and fifth graders at P. S. 98 in southwest Baltimore, where half of the 350 students belong to minority groups, she held a regular school-wide mathematics contest. Once a week, she asked a question based on the previous day's Square One TV program. All students who answered correctly received a small prize. Even though the local broadcast of Square One TV faced competition from situation comedies on commercial channels, Mrs. Sirota usually drew as many as sixty entrants and "a lot of interest," she reports. "Kids would stop me in the hallway to ask when I was going to ask another question."

Like 3-2-1 Contact, Square One TV was primarily designed for children to watch at home, but also is a valuable resource in the classroom. We produce and distribute Square One Teacher Guides, and we plan to reformat the shows for more efficient classroom use. We also have reached an agreement with a publisher, Scott Foresman, to tie Square One TV directly to a major elementary school mathematics textbook series.

Now we are looking to NSF for further support for educational television: additional funding for the production and distribution of new versions of both our mathematics series and 3-2-1 Contact for schools and after school programs—products that are eagerly awaited, research tells us, by the teaching and child-care communities.

NSF has long had the foresight to champion television and related technologies as valuable tools for educating our children. I urge this Sub-Committee to ensure that NSF's important contribution to education continues. In particular, I urge you to fully fund the Materials Development and Informal Science Education Division, and to encourage NSF to continue its support of series such as 3-2-1 Contact and Square One TV. NSF's continuing leadership can help correct the present imbalance of support so that children's educational programming receives the resources it needs to make a difference.

NATIONAL SCIENCE FOUNDATION/NATIONAL AERONAUTICS AND SPACE ADMINISTRATION/ENVIRONMENTAL PROTECTION AGENCY

STATEMENT OF DR. ROBERT L. BALSTER, PRESIDENT, PSYCHOPHARMACOLOGY DIVISION, AMERICAN PSYCHOLOGICAL ASSOCIATION

Senator MIKULSKI. We'd like to now turn to Mr. Robert Balster from the American Psychological Association.

Dr. BALSTER. Thank you very much, Madam Chair.

My name is Dr. Robert Balster. I'm a pharmacologist and psychologist and professor of pharmacology at the University of Virginia in Richmond. I'm the president of the psychopharmacology division, which is one of the divisions of the American Psychological Association. I'm here today representing the American Psychological Association which has over 100,000 psychologists in research and service, et cetera.

I'd like to speak about three agencies whose budgets are under the auspices of this committee: NSF, NASA, and EPA. We do support the proposed administration budget for NSF and I'm particularly delighted with the perspicacity of the administration to seek for a long-term growth in this very important agency for conducting basic research.

One of the problems that we have with the NSF budget recommendations, however, is that there seems to be somewhat of a disproportionately small increase in the biological, behavioral and social sciences directorate. The overall NSF budget for next year is slated for about 14 percent. This directorate is, I believe, is 11.6 percent.

Even more importantly, the two divisions of this directorate that support specifically behavioral and social sciences research is looking at 10-percent and 6-percent increases, respectively. Considering that so many of the problems we face today—drug abuse, violence in the streets, educational deficiencies—that these are fundamentally problems of human behavior, we really think it's important that basic research activities in the behavioral sciences be supported.

ENVIRONMENTAL HEALTH SCIENCES

I refer you to my written comments on the NASA budget. But moving on to EPA, which we've also followed quite extensively for quite a few years, the APA feels like the environmental health sciences in EPA's research budget has fallen through the cracks in research support. The basic problem here is that there are many, many, many chemicals in the environment that have never been tested for any type of safety.

REGULATORY REGULATIONS

The regulatory regulations, FIFRA and TOSCA, that are designed to protect the public from chemicals in the environment are well-conceived in principal but they depend upon data on the chemicals that are out there. The National Academy of Sciences estimates that there are about 65,000 manmade chemicals in the environment; 1,500 new ones are coming in every year; and very few of these have been tested. The testing is done by EPA's HERL and extramural research program, the Exploratory Research Grants Program.

My written testimony gives you a lot of details on where we think the problems lie. Basically, for example, the Exploratory Research Grants Program this year has $2 million in it for health effects-related research on methods development for safety assessment. Work in this area is not being done by anybody else but by federally supported programs. So we would ask you to look at our written comments and consider possibly some dramatic increases in the research budgets of EPA.

Thank you very much.

Senator MIKULSKI. Thank you, Doctor.

[The statement follows:]

STATEMENT OF ROBERT L. BALSTER

Madam Chair and Members of the Subcommittee, I am Dr. Robert L. Balster, Professor of Pharmacology and Toxicology at the Medical College of Virginia, and President of the American Psychological Association's (APA) psychopharmacology division. On behalf of APA -- which represents the concerns of more than 104,000 psychologists - I appreciate this opportunity to present testimony on Fiscal Year 1991 appropriations for the Environmental Protection Agency (EPA), National Science Foundation (NSF) and the National Aeronautics and Space Administration (NASA).

EPA FY 1991 APPROPRIATIONS

BEHAVIORAL AND NEUROLOGICAL TOXICOLOGY - Exposure to chemical substances can result in adverse effects on sensory and motor function, cognitive and intellectual performance, and emotional well-being. In severe cases, some substances can cause paralysis and death. Damage to the human central nervous system is rarely reparable and the economic and social costs to the affected individual and society are vast.

On March 6, 1989, I testified before the Senate Subcommittee on Toxic Substances, Environmental Oversight and Research & Development concerning the Subcommittee's investigation into cases of worker exposure to toxic materials in the aerospace industry. These workers were exposed to new materials used in the manufacture of the stealth bomber at the Lockheed Burbank Facility and the Boeing Seattle area plants. They complained of dizziness, irritability, loss of memory and concentration. These are all symptoms of exposure to a neurotoxic substance. This incident demonstrates the typical approach of responding to health effects stemming from chemical exposure only after dramatic cases receive media or Congressional attention. This, however, need not be the approach utilized in this country. Rather, a proactive approach of screening potentially hazardous substances for their health effects should be adopted.

THE NEED FOR TOXICITY TESTING AND RESEARCH - Chemicals have become an integral part of our daily lives; however, all too frequently, the toxicity of existing and new chemicals is unknown. The National Academy of Sciences (NAS) addressed the need for toxicity testing and research in a 1984 report, Toxicity Testing: Strategies to Determine Needs and Priorities. The study determined that there are more than 65,000 chemicals to which humans are likely to be exposed in use in the U.S. and approximately 1,500 new substances are introduced each year. Very few of these have been tested for adverse effects. Equally disturbing is that for large numbers of chemicals -- 38% of pesticides and their inert ingredients, and approximately 80% of the chemicals in commerce -- no toxicity data are available.

EPA HEALTH EFFECTS RESEARCH - To appropriately assess potentially toxic substances, EPA must have a data base upon which to make informed decisions, based on sound, scientific knowledge. Intra- and extramural research programs need the resources to conduct the long-range research programs necessary to provide this basic knowledge.

APA is greatly concerned about current and proposed levels of federal funding for health effects research at EPA. We believe that the two EPA research programs which fund this type of research, the HERL and the ERG Program, are grossly underfunded and receive an inordinately small portion of the total EPA research budget.

There has been no growth in funding since 1982 for HERL's extramural research program. In fact, the total budget for HERL grew in current dollars from $40 million in FY 1982 to only $47 million in FY 1990, representing a decrease, in constant dollars, of 11% over this period. HERL funding for neurobehavioral toxicity research has increased about 13% over this period in real terms, but this increase is calculated on a disturbingly trivial base, growing from a mere $2.8 million in FY 1982 to only $5 million in FY 1990, in current dollars. For FY 1991, the President's budget proposal requests only $50 million for HERL.

The ERG Program has focused principally on long-range problems. However, its funding history reflects a serious erosion. Since 1981 the dollars allocated to this program have declined consistently (Figure 1). From a high of

$22 million in FY 1981, funding for the program dropped to an all-time-low of $7.5 million in FY 1989. In fact, if funding for the ERG Program had kept pace with the cost of conducting research, as measured by the Biomedical Research and Development Index, it would have been funded at approximately $65 million in FY 1989, rather than $7.5 million. Similarly, the health research component of the program would have been funded at approximately $38 million, rather than $2 million. Clearly, there has been a dangerous erosion of research efforts which would help to protect human health from the adverse effects of chemical exposure.

We are somewhat encouraged by the President's proposed budget of $28 million in 1991, an increase of $10 million over the $18 million budgeted in FY 1990. Nevertheless, given the serious erosion that occurred in the ERG program over a protracted period of time, we believe that the President should go even further in his request and add an additional $7 million in FY 1991 bringing the ERG program to a total of $35 million in FY 1991.

APA recommends a significant expansion of both the HERL and the ERG Program. An authorization and appropriation of at least $35 million for ERG would help to restore a level of funding (in real terms) to this program that existed in FY 1981. Similarly, with regard to HERL, by increasing the budget from $47 million in FY 1990 to at least $60 million in FY 1991, Congress would help restore EPA's ability to fund high quality science.

To put these numbers into perspective, it is useful to highlight the costs of not conducting adequate research on the toxicity of potentially harmful substances. Under the Federal Insecticide, Fungicide and Rodenticide Act, EPA registers pesticides for use after it examines data provided by the manufacturers. After pesticide registration, EPA frequently discovers adverse effects that require suspension of marketing of the material, indicating the inadequacy of the original data and testing techniques used to register the pesticides in the first place. In 1987, EPA paid approximately $30 million in indemnities for the herbicides, 2,4,5-T and silvex. The FY 1987 and FY 1988 costs for storage of these two chemicals and EDB were about $8 million. How many other pesticides will be suspended and how many tens of millions of dollars lost as better data emerges? Against this context, we reiterate that the long-range extramural health research budget of the agency is only $2 million in FY 1989.

NSF FISCAL YEAR 1991 APPROPRIATION

APA strongly endorses the Administration's proposal to increase NSF's budget by 14.4% for FY 1991 to a total of $2.38 billion. Moreover, we applaud the President and NSF Director Erich Bloch for their foresight in proposing a doubling of the NSF budget over the next five years to $3.24 billion in FY 1993. These proposed increases signify a commitment by this Administration to invest in basic scientific research as part of this nation's goal to become more competitive internationally. We appreciate the Subcommittee's support for basic scientific research, which provides the requisite foundation for improving economic growth, productivity, and competitiveness. We urge your committee to approve the public resources needed to rebuild our scientific base and to ensure ongoing support for innovative basic scientific research.

BEHAVIORAL AND SOCIAL SCIENCES - There are many important contributions to be made by the behavioral and social sciences in addressing the critical concerns of our nation. An excellent review of some of the research areas showing great promise to serve national goals is contained in the extensive 1988 report of the National Research Council (NRC). This report, The Behavioral and Social Sciences: Achievements and Opportunities, recommends a "new national commitment to the behavioral and social sciences" and that the federal investment in the behavioral and social sciences be increased by $240 million annually to capitalize on the wide-ranging opportunities for scientific advances. Of this, some $60 million was designated for NSF.

The advances driven by this support would utimately be applied to many of this nation's most intractable problems - discouraging and treating drug abuse, improving education at all levels, and increasing worker productivity and organizational effectiveness. Translating basic science findings in the behavioral and social sciences into practical real-world applications often does not involve the tremendous hurdles that typify technology transfer efforts in other sciences. In fact, behavioral and social science findings often spread quickly through society and lead to effective and practical developments in government policy, industrial management, educational practices, and elsewhere.

The validity of these statements and the importance of behavioral science research has already been recognized by the House Science, Space and Technology Committee, chaired by Robert Roe of New Jersey. In its oversight of NSF 1990 programs (Report 101-309) it asked NSF to report by January 31, 1990 on four matters related to the behavioral and social sciences: 1) Review the recommendations in the 1988 NRC report The Behavioral and Social Sciences: Achievements and Opportunities and compare them with current directions; 2) Review current administrative arrangements for the management of research and educational activities to ensure that the most effective and responsive mechanisms are in place; 3) Prepare a summary of research and education activities in the behavioral and social sciences supported by NSF directorates other than the Biological, Behavioral and Social Sciences (BBS) Directorate during FY 89 and planned for FY 90; and 4) Document the composition of the National Science Board (NSB) by discipline over the past 20 years and describe the rationale in choosing its members by field.

Under the President's proposed budget, the BBS Directorate would increase 11.6% (to $327.5 million). BBS has six divisions, two of particular interest to behavioral and social science researchers -- Behavioral and Neural Sciences (BNS) and Social and Economic Science (SES). Less dramatic increases are proposed for these divisions: BNS - 7%; SES - 10%. Such increases are conspicuously lower than the 14% increase requested for NSF overall and would continue a decade-long real decline of over 30%, measured in constant dollars, for the behavioral and social science programs of NSF. The APA strongly recommends that funding increases for the BNS and SES divisions be made comparable to those of other divisions in the NSF.

The behavioral sciences have much to share with other disciplines and much that they can learn as well. Joseph Young, director of the Language, Cognition, and Social Behavior program, noted that the 1990s are the "Decade of the Brain" and that NSF should tackle the issue of cognitive science involving all the relevant disciplines. Without understanding the natural laws that govern human behavior and allow us to change behavior, we will not be able to develop or apply the means to address such problems as drug addiction and abuse, crime, declines in employee motivation and productivity and organizational effectiveness, and inadequate educational practices.

Our nation is at a critical juncture in scientific, technological, and social development and must devote adequate levels of resources to all these areas in order to preserve and maintain a livable world.

NASA FISCAL YEAR 1991 APPROPRIATION

On July 20, 1989, President Bush proposed that the United States commit itself to "a sustained program of manned exploration of the solar system and the permanent settlement of space". The President declared that we will build Space Station Freedom, go back to the Moon to build a permanent base, and then journey on to Mars. In response to the President's declaration, NASA undertook a 90-day study that developed a strategy for achieving the President's goals. As part of this effort, the Life Sciences Division defined requirements for meeting human needs in the exploration of space.

The success of extended missions will require a thorough knowledge of how to establish conditions that enhance human capabilities for living and working in space for prolonged periods of isolation and confinement. For the crew, long-duration space flight, such as the Space Station, will require separation from customary physical and social environments and confinement within a highly limited and sharply demarcated environment.

Isolation and confinement, experienced in similar ways by submarine crews and Antartic research teams, produce stress which can increase as the mission lengthens. This can result in boredom, depression, irritability, increased anxiety, disturbed sleep, fatigue, hostility, and lowered motivation. These symptoms reduce crew effectiveness and productivity.

According to NASA, problems are now being recognized concerning how available space capsules and systems affect human capabilities to perform effectively within small, confined, and isolated group in extended microgravity conditions. Preliminary reports from long-duration Soviet missions are disquieting. The focus is no longer solely on physiological survivability, but also on the environment and systems needed for humans to work effectively as part of a group to maintain psychological health under the projected conditions of space flight. Among areas targeted for research by NASA are:

crew/environmental interactions, interpersonal interactions, human/machine integration, crew selection, command and control structure, and crew motivation.

The Life Sciences basic research program is an interdisciplinary program that serves to advance science and technical knowledge and to optimize life support for human missions in space. The program has two major thrusts: the assurance of the health, safety, and productivity for space crew members; and the acquisition of fundamental scientific knowledge. The Space Exploration Initiative requires the assurance of crew health, safety, and productivity. The acquisition of fundamental scientific knowledge supports NASA's efforts to assure crew health and safety as well.

The President's FY 1991 budget request for NASA's Life Sciences Program is $163 million, compared to a budget of $106 million for FY 1990 and $79 million for FY 1989. The Life Sciences Division's budget request of $124.2 million for FY 1990 reflected the need to meet near-term flight schedules for five Spacelab missions and begin the definition phase for four more Spacelab missions to be launched in the mid-1990s.

During congressional deliberations on the Administration's FY 1990 budget request for NASA, proposals were made to reduce the $2 billion Space Station request by $400 million. Consequently, Congress reduced the $124 million Life Sciences budget request by $15 million, based on the assumption that Space Station schedules would stretch out and that Space Station-related Life Sciences programs could be delayed accordingly. Sequestration and other budget-reduction measures further reduced the FY 1990 Life Sciences budget to $106 million.

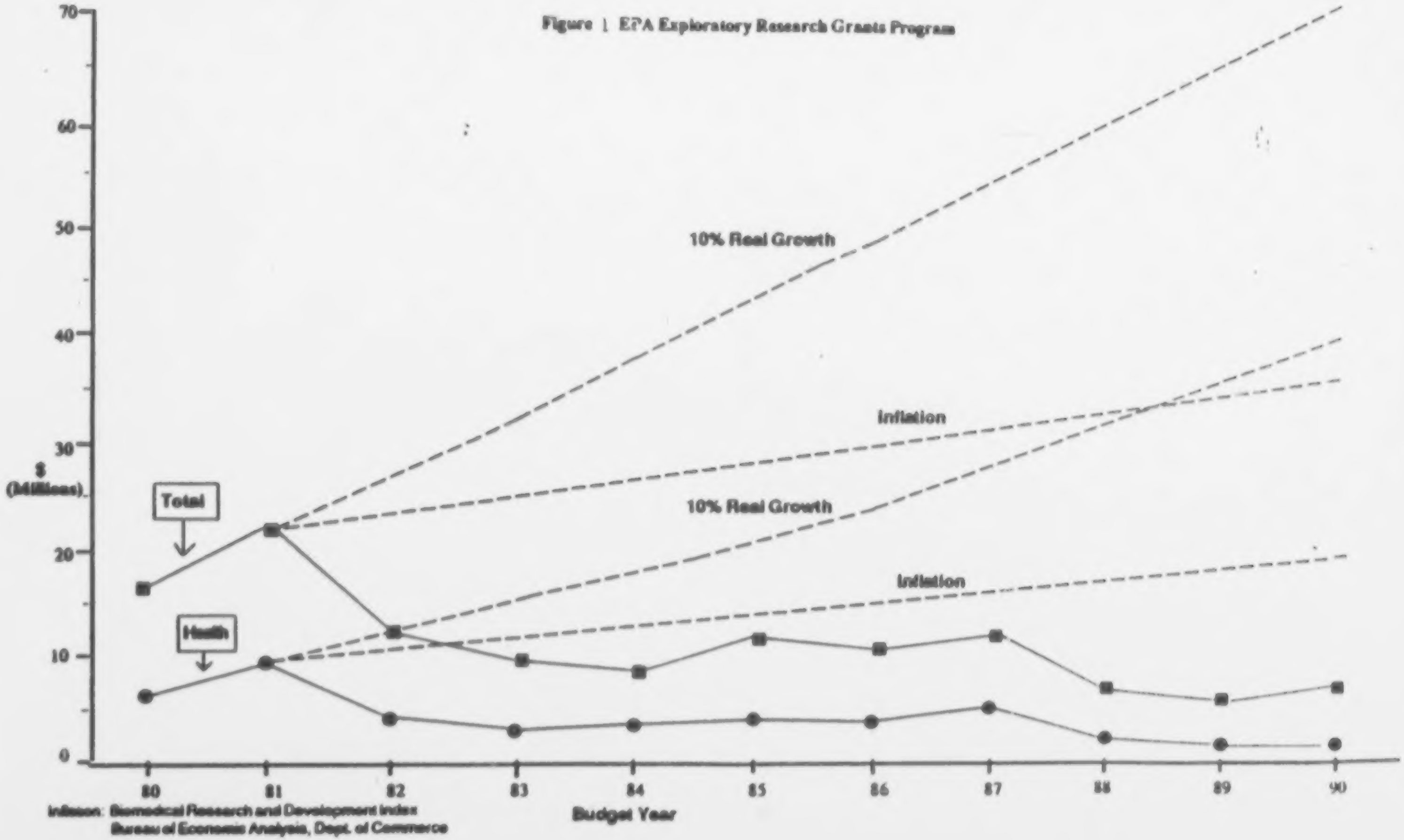
While Congress ultimately appropriated $1.8 billion for the Space Station program, it did not restore any funds cut from the Life Sciences budget, causing the Life Sciences Program to markedly reduce Space Station planning, and scale back planned Spacelab flights. Support to Space Station Freedom was seriously damaged: the Life Sciences Division had to reduce FY 1990 funding for three major Space Station-related programs by more than 90 percent.

Such deferrals place additional pressure on the FY 1991 budget. The APA recommends that the Life Sciences Program at NASA be funded at least at the FY 1991 proposed level of $163 million and preferably at a higher level of $178 million which would restore the $15 million that was removed by Congress from the FY 1990 budget.

At a recent meeting of the National Academy of Sciences, Soviet cosmonaut Vladimir Titov, who holds the world record for long-duration space flight, discussed his experience with U.S. life science researchers. His 366 day mission ended in December of 1988. He told those gathered that psychological preparation for long space flight is more important than physical training. In future long-range space travel and extended operations in space, psychological and life science support will play a much greater role. With these considerations in mind, it is important that the Life Sciences Program at NASA receive adequate funding to perform its important mission.

Madam Chair, I thank you for this opportunity to testify on these issues and would be pleased to answer any questions that you may have.

Figure 1 EPA Exploratory Research Grants Program



Inflation: Biomedical Research and Development Index
Bureau of Economic Analysis, Dept. of Commerce

NATIONAL SCIENCE FOUNDATION

STATEMENT OF ALAN G. KRAUT, EXECUTIVE DIRECTOR, AMERICAN PSYCHOLOGICAL SOCIETY

Senator **MIKULSKI**. We'd now like to turn to Alan Kraut from the American Psychological Society——

Mr. **KRAUT**. Thank you.

Senator **MIKULSKI** [continuing]. Whose motto is: Advancing the scientific discipline and the giving away of psychology in the public interest.

Mr. **KRAUT**. In fact I have some here if you'd like some. [Laughter.]

Senator **MIKULSKI**. You have to know, Mr. Kraut—I've told this story before—while I was working on my master's degree in social work, my supervisor told me I didn't have a therapeutic personality. [Laughter.]

I'm not inviting comments for the record on that.

Mr. **KRAUT**. Actually we represent the other side of psychology, those who are conducting research at universities and colleges across the United States.

The American Psychological Society supports the administration's NSF budget, but we also believe there are important funding issues that muse be addressed regardless of the bottom line of the annual budget. Let me just summarize our written recommendations here.

SEPARATE DIRECTORATE FOR BEHAVIORAL AND SOCIAL SCIENCES

First, I want to express our strong support for NSF investigating the establishment of a separate directorate for behavioral and social sciences. Recently such a study was recommended by a national behavioral science summit meeting and by a task force of NSF's own creation.

We take this position in response to the decade-long pattern of inadequate funding of research in the behavioral and social sciences. We have come to believe that this pattern is due to a structural problem, specifically that those in the highest levels of NSF, who speak for behavioral and social science, are not from those disciplines and do not have the proper understanding of them.

There is great potential for rapid advancement on a number of fronts in psychology, for example, in how children learn math, how biology affects learning, how attitudes affect behavior and artificial intelligence, and factors influencing social development in kids, in the biology of emotions. But the rate at which this advancement will come will depend, in large part, on the level of understanding of NSF's decisionmakers. We believe that such a understanding does not now exist within the agency's senior levels.

On another matter, I want to report to the committee what the behavioral science community is doing to ensure a more stable and productive research enterprise. A behavioral science research summit was convened in January 1990 under the auspices of the American Psychological Society. Representatives of over 65 psychological and behavioral science research organizations began planning a national research agenda, what we are calling the human capital initiative, that will address our most promising frontiers of research. We respectfully request that the committee encourage NSF to follow the human capital initiative research planning effort in its own planning for behavioral and social science research funding.

SCIENCE EDUCATION

Finally, let me turn to the issue of science education. We have been, and will continue to work with the Foundation to address our Nation's crisis in attracting young people to science. But we also think that behavioral science has a unique role to play that has not yet been realized.

First, issues of teaching, learning, and motivation are properly the areas of psychological research. We encourage the Foundation to incorporate more fully the findings of behavioral research as they deal with science education. Too often the prevailing attitude at NSF is, for example, if you want to teach physics to kids, ask a physicist how to do it. This ignores whole areas of relevant research about how science is best taught and best learned.

In addition, we encourage NSF to investigate how teaching of social and behavioral science will interest young children in science generally. Elementary and precollege science emphasizes learning about scientific methods, about how science works. Unfortunately, children are often turned off to science by having to learn these working principles from chemistry, biology, or physics. But those same principles are embedded in the study of human behavior.

Doesn't it make sense that children will be more attracted to science if it's presented in ways to draw on their immediate experience? Having first learned about what science has to offer through intrinsically interesting questions about how people behave, how they think, how they feel, students could well be less intimidated and more ready to learn from other areas of science. We hope the committee will encourage NSF to explore this approach.

That concludes my oral remarks. Thank you.

[The statement follows:]

STATEMENT OF ALAN G. KRAUT

Madam Chair, Members of the Committee: Thank you for the opportunity to testify concerning fiscal year 1991 appropriations for the National Science Foundation (NSF). I am Alan Kraut, Executive Director of the American Psychological Society (APS), the national organization devoted to the research base for psychology.

The American Psychological Society is strongly in favor of increased funding for the National Science Foundation, and we support the Administration's goal of a $3.2 billion budget by fiscal year 1994. But we also believe there are important funding issues that must be addressed regardless of the "bottom line." Today, I will address the agency's fiscal policies that have implications beyond any single annual budget. Specifically, the APS is calling for: (1) the elimination of inequitable funding within NSF research programs; (2) the establishment of a stable funding policy; and (3) support for a long-term planning effort.

My comments are addressed specifically to the behavioral and social sciences, where stable funding is essential to maintaining a vital core of research. First, I wish to express our strong support for NSF investigating the establishment of a separate directorate for the behavioral and social sciences as the mechanism for achieving the fiscal policies outlined above. Recently, this proposal was recommended for study by a National Summit Meeting of over 65 psychological research organizations held under APS auspices and by NSF's own Advisory Committee on Biological, Behavioral and Social Sciences. We urge the Appropriations Subcommittee on NSF to exercise strong oversight in this matter and to direct the NSF to make this study a priority.

FUNDING ISSUES

Our position is based on some assumptions about NSF's mission. The fundamental assumption is that basic research is essential to our advancement as a society and as a nation and has benefits that far outweigh the economic investment. Basic research is one of the core obligations of the federal government, along with national security, education, environmental protection, and other of the primary government responsibilities.

Our other assumption is that support for basic research should be insulated from pressures to evaluate grant proposals on the basis of anything other than the scientific merit of the research itself. One of the main reasons that NSF was established as an independent agency was so that it would not be subject to the political or administrative pressures often present in other government agencies. However, it appears that such pressures do exist within the Foundation, as signaled by the inequality that has characterized funding for the behavioral and social sciences for more than a decade.

The disparate funding has continued at NSF despite the increase in support for psychological, behavioral, and social science research in Congress, the National Academy of Sciences, the National Institutes of Health, and the Alcohol, Drug Abuse and Mental Health Administration. This recognition and support is gratifying, but we are concerned because it has not translated into more equitable funding policies at the NSF.

The disparity is compounded by the fluctuating funding being experienced in NSF's programs for these sciences. At a minimum, NSF and the directorates within it should be able to count on a firm commitment to steady funding over the course of several years, as is appropriate for the long-term nature of basic science. However, this has not been realized, either for the NSF as a whole, or particularly, for the Biological, Behavioral, and Social Science Directorate, in which we are most interested: This trend has created a "stop-and-go" atmosphere among researchers—one not conducive to attracting the best scientists to apply for NSF grants.

STRUCTURAL ISSUES

The nature and importance of behavioral and social science research have been well-documented in numerous reports and legislative testimony. The NSF should be a strong source of support for this research. Throughout the previous decade, this Committee has heard from the behavioral and social sciences concerning the perennial problem of insufficient and comparatively low NSF funding for their areas of research. Originally, this funding problem was thought to be the result of the overt ideological criticism expressed by the White House in the early 1980s.

Now, however, we have come to believe that it is the result of a structural problem within NSF; specifically, that those within the highest levels of NSF who speak for the behavioral and social sciences are not from those disciplines and do not have the requisite understanding of them. This circumstance must change for two reasons: one, to ensure that decisions about public funds are being made in the most responsible and well informed manner, and two, to ensure that such funds are used to support the best science possible.

There is great potential for rapid advancement on a number of fronts within the behavioral and social sciences, among them how children learn mathematics; how biology affects learning; how attitudes affect behavior; artificial intelligence; factors influencing social development in children; and the biology of emotions. However, as in any area of basic research, the rate at which this potential will be realized will depend in large part on the level of funding. Funding, in turn, often depends on a level of understanding on the part of NSF's decision makers.

Such understanding does not exist among the agency's senior level decision makers with regard to psychological, behavioral, and social science research. This will continue to be the case as long as the current structure of the directorate that houses behavioral and social sciences remains. Therefore, we are recommending that NSF seriously study a separate Behavioral and Social Science directorate within NSF to be headed by a member of one of the relevant disciplines. This would ensure that critical decisions about research and funding are being made by those most familiar with the science, and would be an important step in establishing more equitable funding policies.

We urge this Committee to direct that NSF study the concept of a separate directorate for behavioral and social science research at NSF, and report back to the Committee before next year's appropriations hearings.

LONG-TERM PLANNING: A NATIONAL AGENDA FOR BEHAVIORAL SCIENCE

Regardless of the current funding issues, it is important to recognize that NSF is a major source of support for behavioral and social science research. NSF supports nearly one-third of the basic research conducted in the behavioral and social sciences in this nation. It accounts for nearly 8 percent of all basic research in psychology. Despite this significant expenditure, behavioral science research is funded according to a "de facto" agenda that is short term in its perspective and, for the most part, shaped haphazardly by individuals and forces outside the psychological and behavioral science community.

In order to promote the development of the long-term perspective needed for basic research, and to provide a framework for direction in behavioral and social science research, a Behavioral Science Research Summit was convened in January, 1990. Representatives of over 65 psychological and behavioral science research organizations met under the auspices of APS to begin planning a national research agenda for the behavioral sciences. Their fundamental objective was to develop long-range priorities and themes which are consistent with the nation's overall research agenda and which also address the most promising frontiers of basic research.

The Summit was organized by APS to provide the NSF and other federal research agencies with a long-term, stable approach to funding research and training in the behavioral sciences. We respectfully request that the Committee encourage NSF to follow the national behavioral research agenda planning effort in its own planning for behavioral and social science research funding.

SCIENCE EDUCATION

Like many others, APS is concerned about our nation's crisis in attracting young people to science, and ensuring that our general population is more scientifically literate. We have been and will continue to work with the Foundation and others to address the crisis. But we also think that psychology and social and behavioral science may have a unique role to play that has not yet been realized. First, issues of learning, teaching, and motivation are properly the areas of psychological research. We encourage the Foundation to incorporate more fully the findings of behavioral and social science research as they deal with science education. We have found too often that the prevailing attitude at NSF is, for example, if you want to teach physics to kids, ask a physicist how to do it. This ignores whole areas of relevant research about how science is best taught and learned.

Second, we encourage NSF to investigate how precollege experiences with social and behavioral science will enhance efforts to interest young people in science in general. Precollege science emphasizes learning about scientific methods—about how science should proceed. At this point, children are often turned off to science by having to extract these scientific principles from examples in chemistry, biology, or physics. But those same principles are imbedded in the study of human behavior. Doesn't it make sense that children will be more attracted to science if it is presented in ways that draw on their immediate experience? Having first learned about what science has to offer them through the more intrinsically interesting questions about how people behave, how they think, and how they feel, students would be less intimidated and more interested about areas of science that previously seemed remote from everyday life.

Thank you for the opportunity to testify before your Committee concerning the National Science Foundation. I would be pleased to answer questions or provide additional information on our position.

Senator **Mikulski**. Well, we thank the panel for their presentation. On a day when we're going to be taking testimony from approximately 30 public witnesses, we're moving at a brisk pace. We continue to invite those who testify to submit amplifications to their testimony.

Dr. Dorsey, we know, for example, the National Association of Independent Colleges feels very strongly and has excellent supporting documentation on why we need the retrofitting, if you will, of the laboratories within the independent system. I could go around the room.

Also, for Ms. Brooks and the Children's Television Workshop, in a recent OTA study—this then will go to any evaluations you might have or others might have on the efficacy of your—of using TV in the way Children's Television Workshop is used. OTA, in a study for Congress on how to increase the number of scientists, and the pipeline from grade school to grad school, TV was the phrase that they used in the role of informal education.

GIRL SCOUT HANDBOOK

Of course, the challenge was that not all learning occurs in the classroom and we could elaborate on that. I have with me today a handbook put out by the Girl Scouts, "Contemporary Issues: A Challenge for Environmental Education." To those in the field of psychology, you could see that the Girl Scouts know more about developmental psychology than perhaps some of the people within our educational bureaucracies.

They say—and I would assume it would be applicable to boys as well:

> For a young girl it's more meaningful to explore her immediate environment. It's important she get the opportunity to experience the world through her senses; she learns best this way and thrives on first-hand experiences.

You could organize a whole school curriculum on that. It's right out of the developmental, psychological base.

> An older girl is able to branch out and explore interrelationships and nature beyond her immediate environment. She becomes interested in what causes human conflicts, how they can be resolved.
>
> An older girl is challenged by exploring environmental issues that involve people and decisionmaking.

Isn't this what you all are talking about? I'm going to make this mandatory reading by Dr. Cavasos and Dr. Block. I always say that because the testimony here is of course extremely well received.

ROLE OF INFORMAL EDUCATION

In that OTA study that I started to speak about, Ms. Brooks, they talk about the role of informal education, the use of television, but then commented that there hasn't been a lot of work on knowing—does it work, because it goes on outside of a controlled atmosphere, meaning a classroom or so on.

So we would welcome any evaluations. Do you have them? You look like you're eager to comment.

Ms. BROOKS. Well, I was just going to comment that I don't have them with me right at the moment, but we do have papers and surveys to show the efficacy of our programs. I would be happy to submit them.

Senator MIKULSKI. We welcome that. In back of these 2-minute crisp testimonies, I know, is documentation. Now, I know you're worth your weight in gold but you don't have to give me the documentation to demonstrate that. But we really would like any other amplification on the points that you've made that we could use in the committee's deliberation.

We hope to increase the National Science Foundation funding this year. We're waiting for what comes out of the budget summit to see that we can do that, and particularly in the area of improving and expanding educational opportunities.

So we thank you for your testimony. You're truly the incubators of the development of human capital and we——

Mr. **Kraut**. Senator, that sounded pretty therapeutic to me. [Laughter.]

Senator **Mikulski**. Well, I've been working hard—well, how did you feel about what I said. [Laughter.]

We're now going to call the next panel. I'm going to ask my chief of staff on this committee to do that.

Dr. Dorsey, could I have a word with you?

Mr. **Kelly**. Could we have panel 10? That's Dr. David Johnson, Dr. Shoemaker, Dr. Moghissi, Drs. Crowley and Roschwalb, and Dr. Gassman.

Senator **Mikulski**. Dr. Johnson, we welcome your testimony on behalf of the Federation of Behavioral, Psychological and Cognitive Sciences.

STATEMENT OF DR. DAVID JOHNSON, FEDERATION OF BEHAVIORAL, PSYCHOLOGICAL, AND COGNITIVE SCIENCES

BASIC BEHAVIORAL AND SOCIAL SCIENCE RESEARCH

Dr. **Johnson**. Thank you, Madam Chair.

Early in the 1980's, NSF support for basic behavioral and social science research was slashed. A decade of struggle to recover lost ground has brought us close to the support level at the end of the 1970's. But other sciences have been growing, not making up deficits. The result is that basic behavioral and social science research funding has grown worse over time, when measured against other sciences.

Years of inadequate support have forced researchers to rely on mission-oriented agencies for basic research support. They have piggy-backed bits and pieces of basic research on applied projects. Naturally, it's been difficult to advance the sciences in this way.

Nevertheless, significant advances have been made. Specific relations between the mechanisms of the brain and observable behavior have been established in the last decade, for example. Several subdisciplines are poised for explosive development, and frustration at being unable to find sufficient basic research support is intense—so much so that a recent report by a task force of NSF's Advisory Committee for the Biological, Behavioral, and Social Sciences recommended consideration of separating behavioral and social sciences from biology and placing them in their own directorate.

The rationale is that our pleas will be ignored until our scientists sit at the table where budgets are made. It's a drastic approach but so is the problem. Moderate gestures have not communicated the depth of frustration our scientists feel. The fact that the line item for instrumentation within the current directorate is $7 million larger than the line item for behavioral and social science research illustrates the problem.

Our scientists ask merely that their work be treated the same as other sciences poised for rapid development. We wholeheartedly support the President's budget request for the National Science Foundation. We believe that basic science is the bedrock of economic growth for the country. But, as the President's science advisor has said, the most serious problem we face in improving productivity is not technological, it is social and behavioral.

To address that challenge, there must be better basic research support for the social and behavioral sciences. We recommend that the growth rate of the line items supporting behavioral and social science equal the requested growth rate for NSF overall.

I thank you for permitting me to express these views.

Senator MIKULSKI. Thank you very much, Mr. Johnson.

[The statement follows:]

STATEMENT OF DAVID JOHNSON

Early in the 80s, NSF support for basic behavioral and social science research was slashed. A decade of struggle to recover lost ground has brought us close to the support level at the end of the '70s. But other sciences have been growing, not making up deficits. The result is that basic behavioral and social science research funding has grown worse over time when measured against other sciences.

Years of inadequate support have forced researchers to rely on mission oriented agencies for basic research support. They have piggy backed bits and pieces of basic research on applied projects. Naturally, it has been difficult to advance the sciences in this way. Nevertheless, significant advances have been made. Specific relations between the mechanisms of the brain and observable behavior have been established in the last decade, for example. Several subdisciplines are poised for explosive development, and frustration at being unable to find sufficient basic research support is intense--so much so that a recent report by a task force of NSF's Advisory Committee for the Biological, Behavioral and Social Sciences recommended consideration of separating behavioral and social sciences from biology and placing them in their own directorate. The rationale is that our pleas will be ignored until our scientists sit at the table where budgets are made. It is a drastic approach, but so is the problem. Moderate gestures have not communicated the depth of frustration our scientists feel. The fact that the line item for instrumentation within the current Directorate is $7 million larger than the line item for behavioral and social science research illustrates the problem.

Our scientists ask merely that their work be treated the same as other sciences poised for rapid development. We wholeheartedly support the President's budget request for the National Science Foundation. We believe that basic science is the bedrock of economic growth for the country. But as the President's Science Advisor has said, the most serious problem we face in improving productivity is not technological. It is social and behavioral. To address that challenge, there must be better basic research support for the social and behavioral sciences. We recommend that the growth rate of the line items supporting behavioral and social science equal the requested growth rate for NSF overall. I thank the Subcommittee for permitting me to express these views.

STATEMENT OF DR. ALAN MOGHISSI, AMERICAN SOCIETY OF MECHANICAL ENGINEERS

Senator **Mikulski**. Now we're going to ask Dr. Nelson Milder to testify for the Society of Mechanical Engineers.

Dr. **Milder**. Madam Chair, I am substituting for Dr. Alan Moghissi from the University of Maryland who apparently hasn't arrived yet.

I am the assistant director for government relations for the American Society of Mechanical Engineers, and I'm appearing before you today on behalf of that society and the task force on the National Science Foundation.

The precarious international positions of the United States in manufacturing competitiveness and in energy dependence are well known. Forecasts show an alarming decline in the number of U.S. students who will be entering the engineering colleges in the coming decade and a subsequent long-term loss of technical manpower.

ENGINEERING DIRECTORATE

Of the total NSF request, 9.5 percent is allotted to the engineering directorate, up slightly from the 9.4 percent of the fiscal year 1990 program. Given the importance of engineering in solving the immediate serious problems facing the United States in manufacturing, energy, and the projected decline in engineering manpower, we believe that the portion of the NSF budget devoted to engineering should be augmented to at least 10 percent of the total fiscal year 1991 budget by additional funding.

The task force strongly endorses the NSF 1991 proposal to double funding for engineering education within the engineering directorate to $12 million, while raising the budget for the science and engineering directorate by 22.9 percent over the 1990 appropriations. These programs, in concert with our 10-percent boost for engineering research, would begin to stem the tide of declining enrollment, enhance programs aimed at increasing the number of women and minorities in the engineering profession, and strengthen the NSF research programs needed to bring U.S. citizens into faculty positions at our engineering colleges.

In this latter regard, the NSF task force notes, with some concern, that the funding for the basic research within the engineering directorate is not projected to enjoy the same growth as other portions of the budget. As this basic research funding supports faculty and graduate student development, the situation is critical.

ENGINEERING RESEARCH CENTERS

Funding for the NSF engineering research Centers is increased by 19.9 percent over the fiscal year 1990 appropriations in the NSF request this year. We are pleased to note that this funding includes a $7.5 million increase for the 19 existing engineering research centers and their efforts to include more undergraduate students, women, and minorities.

The NSF task force strongly supports the Foundation's commitment to developing a high level of Federal support for engineering research and education. We urge Congress to further increase the

NSF funding level so that the engineering directorate can grow to 10 percent or more over the total NSF budget.

I thank you, Madam Chair.

Senator **Mikulski**. Thank you very much for your testimony.

[The statement follows:]

STATEMENT OF DR. ALAN MOGHISSI

Madame Chairwoman and Members of the Subcommittee: My name is Dr. Alan Moghissi and I am appearing before you today on behalf of the Council on Education of the American Society of Mechanical Engineers' (ASME) Task Force on the National Science Foundation (NSF). This statement represents the consensus of the Task Force rather than an official position of ASME.

We appreciate this opportunity to express our views on the proposed fiscal year 1991 budget request of the NSF. ASME is a non-profit educational and technical society founded over 100 years ago. Today our membership exceeds 119,000 mechanical engineers, including 19,000 students.

Engineering is the practical application of science. Mechanical engineering is the branch of engineering that primarily deals with design of mechanical equipment and with energy and its conversion. Mechanical engineers deal directly with a very broad range of engineering, including manufacturing of all types; design of new products and equipment; and all forms of energy production, conversion and consumption. As such, mechanical engineers directly affect practically every aspect of daily life.

The precarious international positions of the United States in manufacturing competitiveness and in energy dependence are well known. Forecasts show an alarming decline in the number of U.S. students who will be entering the engineering colleges in the coming decade and a subsequent loss of technical manpower. Vigorous efforts to address and solve these problems are underway in ASME, as well as in its sister technical societies. NSF plays a key role in initiating, cooperating with, and providing support to these efforts.

The fiscal year 1991 NSF budget request for the Engineering Directorate is $226 million, a 12.9 percent increase over the current year's plan of $200.2 million. The fiscal year 1991 request for the Engineering Directorate is 9.5 percent of the total NSF request of $2.38 billion, up slightly from the 9.4 percent of the 1990 current plan.

Given the importance of engineering to this country, and the immediate serious problems facing the United States in manufacturing competition, in energy technology and energy supply, and the projected decline in engineering manpower, we believe that the portion of the NSF budget devoted to engineering is inappropriately small and should be augmented to at least 10 percent of the total fiscal year 1991 NSF budget by additional funding.

The forecasted decline in the number of U.S. engineering students and, as a consequence, the number of engineers in this country, is serious and potentially catastrophic. The number of engineering degrees awarded has declined each year since 1986, and the total enrollment in all engineering colleges has declined continuously since 1983, indicating that the drop in degrees will continue for the foreseeable future.

NSF is addressing this problem through increasing the proposed funding in two areas. First, within the Engineering Directorate, proposed funding for Engineering Education within the Engineering Infrastructure Development Program has been doubled to $12 million. Second, the 1991 proposed budget for the Science and Engineering Education Directorate is $251 million, up 22.9 percent from the current year's plan. These increases have the NSF Task Force's wholehearted support, and funding for these areas must continue to be the highest priority. In addition, programs in the Engineering Directorate aimed at increasing the representation of women and minorities among engineers deserve full emphasis and funding.

The United States provides engineering education that is without parallel in the world. This is evidenced by the large number of foreign nationals who take advantage of our programs. Now, however, too few U.S. students are entering graduate engineering programs in order to prepare themselves to become productive in both industry and academia. A significant portion of U.S. citizens now on engineering faculty will retire within ten years. Unfortunately, some U.S. companies fail to recognize that maintaining the nation's competitive edge in the international marketplace requires educating engineers beyond the undergraduate level.

If U.S. citizens are to make up a major segment of the faculty in our engineering colleges, then NSF research programs must be maintained and expanded. Otherwise, a critical resource will be lost to us. NSF remains the major source of funding for basic research programs carried out by engineering faculty and by both graduate and undergraduate students. This funding supports innovative projects often of value to industry, and provides support for the advanced training of engineers and future faculty. However, the Task Force notes with concern that the funding for the basic research portion of the Engineering Directorate, which supports faculty and graduate student development, is not projected for the same growth as the other portions of the budget.

The funding provided by NSF's Engineering Directorate is vital for the development of future faculty for U.S. colleges of engineering. Many of the present faculty were supported as students by NSF programs; many received their initial research funding as faculty from NSF through the NSF Research Initiation Grant or Presidential Young Investigator programs. This initial research funding often led to later support for the research from industry, other federal agencies, or other sources. With the prospective decline in defense spending and the ripple effect of this decline on industrial research support, these follow-on sources may not be available. NSF programs are not robust enough under the proposed budget to replace them. We believe that this problem of "reentry" research support for faculty when NSF sponsored initiation grants expire should be addressed in succeeding budgets.

While many engineering and science problems, once identified, can be successfully investigated and brought to the point of application through large-scale approaches typified by research centers and national laboratories, it is also true that many if not most innovations come from single investigators or small groups. Thus, it is vitally important to maintain balanced funding between mission oriented large-scale laboratories, research centers, and universities and the less-directed programs of individual and small-team investigators.

The funding for the NSF Engineering Research Centers falls within the Engineering Directorate, and the proposed budget for the Centers is increased by $8.9 million to a total of $55.3 million, an increase of 19.9 percent over the fiscal year 1990 plan of $46.4 million. We are pleased to note that this funding includes a $7.5 million increase for the nineteen existing Engineering Research Centers and their efforts to include more undergraduate students, women, and minorities.

In closing, the NSF Task Force strongly supports the proposed increases for the fiscal year 1991 NSF budget and endorses the Foundation's commitment to developing a high level of federal support for engineering research and education. We urge Congress to further increase the NSF funding level so that the Engineering Directorate can grow to 10 percent or more of the total NSF budget, and to help double the overall NSF budget by 1994. It is our hope that the Subcommittee will view the NSF budget as a critically important investment in the economic and industrial future of the United States, and will continue to increase funding levels to the National Science Foundation.

STATEMENT OF JOHN C. CROWLEY, VICE PRESIDENT, ASSOCIATION OF AMERICAN UNIVERSITIES AND AMERICAN COUNCIL ON EDUCATION, ASSOCIATION OF GRADUATE SCHOOLS, COUNCIL OF GRADUATE SCHOOLS, NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

Senator **Mikulski**. Now we're going to turn to Mr. John C. Crowley, representing the American Association of Universities, and also, from his perspective, the National Association of State and Land Grant Colleges. We know we heard the viewpoint from, I guess, the astronomy departments earlier, but I'm sure there's an integration in that testimony.

Mr. Crowley?

Mr. **Crowley**. Thank you, Madam Chair.

Senator **Mikulski**. Oh, and also you're testifying on behalf of the American Council on Education, the Association of Graduate Schools, the Council of Graduate Schools, as well as AAU and the National Association of State Universities and Land-Grants.

Mr. **Crowley**. Thank you, Madam Chair. I appreciate the opportunity.

NATIONAL GOAL ABANDONED

Three years ago, the administration announced a national goal to double the NSF budget in 5 years, and Congress agreed and passed that bill overwhelmingly.

Now, 3 years into the 5-year plan, the doubling goal has been effectively abandoned. Many research programs now are losing, not gaining, ground. Adjusted for inflation, nearly two-thirds of the research programs are now below their 1988 levels; many have absorbed reductions of 10 percent or more.

These include 14 of 23 programs in biological, behavioral and social sciences; 16 of 20 engineering programs; 21 of 27 math and physical sciences programs; and 5 of 14 programs in the computer and information sciences.

As a result of the reductions in 1990, all research awards were further reduced by 2 percent. Many of these cuts came after awards were announced and faculty had made their commitments to students. As a result, 4,700 fewer faculty and students are being supported this year. No new interdisciplinary centers will be established, and several of them previously established are already significantly underfunded.

The Foundation is the only Federal agency which invests in research and education in science and engineering as its sole mission. It's the major source of investment in academic science, and research, as this subcommittee knows, is a sound investment.

WORLD LEADERSHIP POSITION THREATENED

Our future ability to compete in the international marketplace makes our investments in science and engineering education and research essential, and they will largely determine whether we retain our position as world leader or relinquish it to others.

In education, NSF plays a critical role from grade school to graduate school. As has already been pointed out, the importance of making these necessary investments in education and training cannot be overstated. Those who will receive their Ph.D. degrees in 2005 are 12 years old today. The college graduating class of 2005 is now in kindergarten or first grade, and the high school class of 2005 are today's 2-year-old toddlers.

However, attracting greater numbers of the academically gifted, while necessary, is simply insufficient if we are to retain our leadership. By 2020, 70 percent of our work force will be minorities and women; both groups are underrepresented in science and engineering today. Blacks, in 1987, made up 12.2 percent of our population, yet accounted for only 1 percent of our Ph.D.'s in the physical sciences and engineering.

The United States is simply failing to attract its best citizens as students into graduate programs and we're relying increasingly on foreign sources, not only for our Ph.D.'s, but for our new industry and Federal labs and for our university research scientists and engineers. For these reasons, the Foundation's education/human resources programs merit your full support.

ACADEMIC RESEARCH FACILITIES

Finally, a brief word about academic research facilities, a chronic problem growing worse. For more than 20 years, we've not had a Federal academic facilities investment policy as part of our national research enterprise. Meanwhile, the problems posed by the deteriorated facilities well-known to this committee grow worse.

In September 1988, NSF reported that for every $1 the universities spend on repair and maintenance, $3.60 is deferred. For every $1 spent on new construction, $2.50 is deferred. Many universities now individually report their own needs at $300 million or more. Borrow the funds, some say. Many institutions indeed have borrowed funds, and they're now at the limit of their ability to carry that debt load.

The 1991 budget, as you know, proposes only $20 million for the new NSF program; that's the same level as provided this year—at the initiative of this subcommittee, I must add and we thank you for your leadership. That, however, is only 10 percent of the program's authorization. Even if it's fully funded at that level, that program alone cannot carry the entire burden. Other agencies must play a role and changes in Federal costing and tax policies are needed.

All of the higher education associations are united in our support of increased funding for this program. However, for the reasons cited above, we emphasize that such funding should not be provided at the expense of science and engineering education, and especially not at the expense of the NSF research programs.

Thank you for the opportunity to appear.

Senator MIKULSKI. Thank you, Mr. Crowley. I must say that this testimony, as others that have been presented, is just chock full of very important items. Again, I will repeat, as I have said earlier, anything that's been condensed for the purpose of our taking the testimony, you're invited to amplify.

You, sir, I know testified on behalf of a cluster of organizations and we want to be sure that, since they yielded to a single witness, to ensure that each one of those agencies has their viewpoint included in the record.

Mr. CROWLEY. Thank you, Madam Chair.

[The statement follows:]

STATEMENT OF JOHN C. CROWLEY

Mr. Chairman, Members of the Subcommittee:

I appreciate the opportunity to testify in support of the research, education and academic facilities programs of the National Science Foundation.

Research Programs In Stress - The Reality of Failed Goals

Three years ago, the Administration announced a national goal to double the NSF Budget to $3.2 billion in five years, by Fiscal Year 1992. Congress agreed. A five-year bill to accomplish that goal passed overwhelmingly.

Now, three years into the five year plan, the doubling goal has been effectively abandoned. Many research programs now are losing, not gaining, ground. Adjusted for inflation, nearly two-thirds of the research programs are now below their 1988 levels; many have absorbed reductions of 10 percent or more. These programs include:

- 14 of 23 research programs in the Biological, Behavioral and Social Sciences;
- 16 of 20 Engineering programs (11 are cut by 10 percent of more);
- 21 of 27 Mathematics and Physical Sciences programs; and
- 5 of 14 programs in the Computer and Information Sciences.

As a result of reductions in FY 1990, all research awards were further reduced by two percent; many of these reductions came after awards were announced and faculty had made commitments to their students. As a result, 4,700 fewer faculty and students are being supported this year. No new interdisciplinary research centers will be established, and several centers previously established are significantly underfunded.

The Foundation is the only federal agency which invests in research and education in science and engineering as its sole mission. It is the major source of federal investment in academic science in the physical sciences, environmental sciences, mathematics and computer sciences and the social and behavioral sciences. While NSF accounts for only about 3 percent of total Federal R&D investment, for some disciplines it is virtually the sole source of federal support.

Research is a sound investment. Dr. Edwin Mansfield at the University of Pennsylvania conservatively estimates that our annual rate of return on our research investments is 28%. The U.S. Department of Labor estimates that technological innovation, which flows both from basic research and the insights of the graduates of our universities, accounts for 44 to 77% of our increased productivity.

Our future ability to compete in the international marketplace depends on a great many factors, most of which lie beyond the purview of the National Science Foundation, of our universities, and, indeed, of this Subcommittee. Research and education alone do not hold the entire answer to our economic challenges or to an improved standard of living either for us or for our competitors. But our investments in science, engineering and education are essential elements of genuine solutions to our current problems and our future progress. Our investments in the creation of new knowledge and in the education of the next generations of scientists, engineers, teachers and managers will largely determine whether we retain our position as a world leader or relinquish it to others. We urge your full support for NSF research programs.

Human Education and Human Resources Programs - A National Imperative

In education, NSF plays a critical leadership role from grade school to graduate school. The FY 1991 budget request of the Foundation includes $347 million, an increase of $62 million for Foundation-wide education and human resources programs. If the budget is funded over 73,000 high school students, teachers, undergraduate and graduate students, postdocs and senior researchers will be supported.

Foundation-wide a 48 percent increase is proposed to improve participation by students, faculty and institutions in science and engineering programs; women, minorities and the disabled are priorities. More young investigators will be supported, with 200 additional Presidential Young Investigator awards are proposed.

At the precollege level, the Foundation is playing an important leadership role by increasing science teacher preparation and increasing support for related K-12 programs by 17 percent. Undergraduate programs will receive $105 million, an increase of 63% over last year. These investments will help attract more young men and women, especially minorities, now in high school and college to go on to graduate programs within the next few years. These are the primary pipeline from which will come the scientists and engineers who will replace the wave of faculty retirees that looms just ahead. The NSF Graduate Fellowship Program is being increased to 1100 awards, double the 1987 level. The program continues to attract outstanding young students into graduate studies, and it's expansion should be sustained.

The importance to the nation of making the necessary investments in education and training now cannot be overstated. Those who will receive their Ph.D. degrees in 2005 are already 12 years old. The college graduating class of 2005 is in kindergarten or first grade and the high school class of 2005 are today's two-year old toddlers. We must educate these children better than their older siblings, and we must attract more of them into scientific and technical careers. We also must increase scientific and technological literacy and competence. While state and local levels of government play the lead role at the K-12 level, the Foundation's programs are targeted to strengthen science teaching and to attract more youngsters into applying for admission to college -- hopefully as majors in science and engineering.

However, attracting greater numbers of the academically gifted, while necessary, is simply not sufficient if we are to retain leadership in the intensifying economic, technological, and cultural international competition. By 2020 it is estimated that 70% of our work force will be minorities and women. Both groups are under represented in our present science and engineering classrooms. In 1987 Blacks, who make up 12.2% of the U.S. population, made up only 1% of the Ph.D. degrees awarded to U.S. nationals in physical sciences and engineering. Women account for only 6% of engineering Ph.D.s awarded, contrary to their better progress in law, medicine, and business.

The U.S. is failing to attract our best U.S. citizens as students into graduate programs, and we are coming to rely upon foreign sources not only for our Ph.D.s but for our new industry and federal labs and for university research scientists and engineers. In 1970 about 85% of all doctorates earned were U.S. nationals. It is now about 70%. But in physical sciences the drop was from 82% to 62% and in engineering from 73% to 41%. White male doctorate recipients have dropped from 17,000 to 12,000 between 1970 and 1988.

These figures are disturbing not only for U.S. defense interests; they don't bode well for our national competitive position across the board. Dr. Richard Atkinson, former Director of NSF and current Chancellor of the University of California, San Diego, has estimated the U.S. shortfall in Ph.D. output in science and engineering to be 7,500 by the turn of the century. U.S. universities are working at every level in the pipeline from preschool through K-12, the undergraduate years and in our graduate schools to turn this around, but they cannot do it alone. More adequate graduate-level financial aid must be one ingredient in addressing this problem. The NSF programs requested in the budget will contribute toward this need.

Academic Research Facilities - A Chronic Problem Growing Worse

For more than 20 years, we have not had a federal academic facilities investment policy as part of our national research enterprise. Meanwhile, the problems posed by deteriorated academic research facilities, well known to this Subcommittee, continue to grow. In September, 1988 NSF reported that for every dollar the universities spend on repair and maintenance, they defer $3.60; for every dollar spent on new construction, $2.50 is deferred. Individual universities now frequently report accumulated needs of $300 million or more. Borrow the funds, some say. Many institutions have borrowed funds, and they now are at the limit of their ability to carry the debt load.

The FY 1991 budget proposes only $20 million for the new NSF program, only 10 percent its authorization. Even fully funded at the authorized level, this program alone cannot carry the entire burden. Other agencies must play a role. Changes in federal costing and tax policies are also needed.

We request increased funding for this NSF account. However, for the reasons cited above, we emphasize that such funding should not be provided at the expense of science and engineering education, and especially not at the expense of research.

Thank you for the opportunity to appear before the Subcommittee. I would be pleased to respond to questions.

STATEMENT OF DR. PAUL G. GASSMAN, PRESIDENT, AMERICAN CHEMICAL SOCIETY

Senator **Mikulski**. Now we would like to turn to Mr. Paul Gassman from the American Chemical Society.

Dr. **Gassman**. Madam Chair, I'm Paul Gassman, President of the American Chemical Society which, with 140,000 members, is the largest scientific society in the world.

Chemistry in the United States is quite important. The chemical industry contributed a $15.7 billion positive balance of trade in 1989. However, we fear that that will not be able to continue for a long period.

EDUCATION SYSTEM IN DECLINE

We see that we are faced with an educational system in decline and we're afraid that that's going to give us rather severe problems. The pipeline for production of a Ph.D. chemist, from the start of the bachelor's degree to graduation as a Ph.D., is 11 years. If you look at the education through high school and grade school, we're talking about a 20-year pipeline. That pipeline is cracked at many points and we need some fixing.

We need to worry about educating the educators, and that's one of the things I want to talk about in detail this morning. If we look at the educational system in universities and colleges in the United States, and particularly relative to chemistry, what I see us facing is a real educational disaster. Part of this is because we will not have the educators to educate the educators. We will not have the college professors that we need.

If we look at what we are facing today in the United States, we generate about 200 new faculty positions in chemistry departments each year. We're about a year behind in filling those. So each August, we are faced with about 400 open positions. In 5 years we start generating 300 a year; in 10 years we start generating 500 per year, and in 12 years we will be generating about 600 per year.

This is at a time when, according to National Research Council numbers in 1985, only 8 percent of those getting Ph.D.'s in chemistry wanted academic jobs. This is 147 individuals, and we're talking about generating 300, 400, or 500 jobs per year for that 147 people. It says nothing even about whether those 147 people are qualified.

By the year 2000, shortly after the year 2000, we project that we will have over 2000 faculty positions in chemistry in the United States unoccupied. This is a disaster from our point of view. The situation that we see is one where students do not want to go into teaching; they see their advisers spending twice the time they did 10 years ago writing proposals, trying to get funding. It is a very serious problem from our perspective.

We would recommend that the educational system needs fixing in many different ways. We recommend that the education directorate of the National Science Foundation be funded at the $300 million level in order to bring it up to where it should be. We also strongly recommend that serious consideration be given to increasing the funding for individual investigator grants, because that is probably the single factor which turns students off, graduate students off, to going into education and becoming the professors of the future.

Thus, we would recommend a 10-percent increase for individual investigator grants in the areas of chemistry, material science, and chemical and thermal systems.

Madam Chairman, I thank you for your time.

Senator MIKULSKI. Thank you, Doctor.

[The statement follows:]

STATEMENT OF DR. PAUL G. GASSMAN

Madam Chair and Members of the Subcommittee:

My name is Paul G. Gassman. I am the current President of the American Chemical Society (ACS) which, with over 140,000 members, is the world's largest scientific organization. I am pleased to appear before you today to comment on the FY 1991 budget request for the National Science Foundation (NSF).

The United States currently is faced with fierce economic competition from other countries. Government and industry must bring all available resources to bear on those areas which enable the U.S. to meet the challenges of competition today and to prepare for those of tomorrow. Basic research is the keystone to our Nation's success, and the National Science Foundation (NSF) is a crucial player in this area.

NSF plays a central role in funding science education and research activities at all levels, and is the principal funding source for non-mission oriented basic research in academia. Historically, such research has been the source of the creativity, knowledge, and talent which has made American science and technology strong. In this time of fiscal constraints, the American Chemical Society (ACS) is concerned that Congress will overlook the importance of basic research to technological progress and economic growth. The Society is on record in support of the doubling of the National Science Foundation's budget as authorized by Congress in 1988, and urges Congress to adhere to its original timetable.

Our Nation must strengthen and emphasize science education at all levels in order to have the capable workforce needed to improve our competitive position worldwide. The ACS finds the Foundation's FY 1991 request for the Science and Engineering Education Directorate insufficient to achieve these goals.

- In order to address the education problem, the American Chemical Society urges Congress to fund the Science and Engineering Education Directorate at a level of $300 million in FY 1991. The funding requested by ACS--a 47 percent increase over FY 1990--will bring the budget in line with NSF's drive to implement the recommendations of the National Science Board report, ***Undergraduate Science, Mathematics, and Engineering Education*** (the "Neal Report"). The ACS would like to see this additional $49 million (above the Administration's request) used principally for additional expansion of the Teacher Preparation and Enhancement subactivity, and for the Course and Curriculum Program within the Undergraduate Science, Engineering and Mathematics Education (USEME) subactivity.

The Nation's academic research enterprise has a history of remarkable successes to its credit. Despite these successes, pressure is being exerted on Research and Related Activities (R&RA) programs due to the funding of expanded initiatives within R&RA's budget. New funds for education, human resources, facilities, major equipment, and centers initiatives at NSF, without commensurate growth in other areas, translate into minimal or negative growth for traditional investigator-based research support.

- In order to provide the support essential to sustain the health of NSF's academic research activities, the ACS urges that Congress appropriate $2.20 billion for Research and Related Activities in FY 1991. This represents an increase of $475 million above FY 1990, and is the level authorized by Congress for FY 1991.

The "chemical and allied products" industries are among the few sectors of the U.S. economy reporting a favorable trade balance--$15.7 billion in 1989. This strong showing results not only from the talent and energy of the industry, but also from the investment made by the federal government in past years in academic research in the chemical sciences and engineering. Funding for basic research in the chemistry, materials, and chemical engineering fields has had dramatic impact on every sector of the Nation's economy, and has produced such vital products as light-weight composites of incredible strength for use in aircraft, fiber-optics for communications technology, pharmaceuticals, and chemical processes for handling hazardous wastes.

The American Chemical Society is alarmed to see a decline in the funding of academic research in the chemical sciences and related fields. Insufficient growth in these areas is squeezing the research community--many promising areas of research worthy of funding are not being pursued. This decline must be arrested and reversed if the competitiveness of chemical and allied industries, as well as other sectors of the economy dependent on technologically important R&D, is to be maintained. Therefore, the ACS recommends that funds for the Divisions of Chemistry, Materials Research, and Chemical and Thermal Systems be increased by a minimum of 10 percent for FY 1991. The accompanying Appendix contains the Society's recommendations in greater detail.

The American Chemical Society asserts that the Foundation's role in promoting science education and research is essential to the economic well-being of the United States. The Nation must invest in these critical areas now, in order to address the education crisis and to remain a world leader in science and technology.

APPENDIX

Technological progress is rooted in U.S. investment in education and research, particularly at colleges and universities. Our ability to compete in a worldwide marketplace depends on technological advances made through basic research conducted at these institutions, as well as on the education systems that prepare the scientifically literate workforce needed by the Nation's industry.

The National Science Foundation (NSF) plays a central role in funding science education and research activities at all levels, and is the principal funding source for non-mission oriented basic research in academia. Congress, recognizing the importance of these activities to America's future, passed legislation in 1988 that authorized a doubling of funds for the National Science Foundation over a five year period. However, NSF's final appropriations for the past three fiscal years have consistently failed to meet the targets set out in the authorization. The Administration, recognizing this, has adopted a newer, longer-term schedule for doubling NSF's budget.

Despite all these factors, NSF's FY 1991 request does not address the impact of underfunding research grant programs in recent years, nor does it provide the funding necessary to gain momentum in addressing science education needs. The American Chemical Society (ACS) urges Congress to fund science education and research activities at a level sufficient to recoup the ground that has been lost and to prepare for tomorrow's challenges. The ACS supports the doubling of the National Science Foundation's budget as authorized, and urges Congress to adhere to its original timetable.

SCIENCE AND ENGINEERING EDUCATION

In its statements to Congress on the FY 1989 and FY 1990 NSF budgets, the American Chemical Society expressed strong support for a gradual increase in the Science and Engineering Education (SEE) Directorate budget to $600 million over a four-year period. Neither the increase in the SEE budget proposed by the Administration, nor the slightly higher figure appropriated by Congress each year, is sufficient for this target to be reached by FY 1993. ACS is pleased that the Administration is requesting an increase of $46.7 million for SEE programs in FY 1991, for a total program of $251 million, but once again this figure does not sustain the momentum required to reach $600 million by FY 1993. The Society believes that a more realistic figure for FY 1991 would be $300 million, with the $49 million increase above the FY 1991 request (a 47 percent increase over

FY 1990) used principally for additional expansion of the Teacher Preparation and Enhancement subactivity, and for the Course and Curriculum Program within the Undergraduate Science, Engineering and Mathematics Education (USEME) subactivity.

Funds for the Teacher Preparation and Enhancement subactivity in FY 1991 show an increase of 10.6 percent over the FY 1990 level. This increase, however, must accommodate the recent rise in precollege teachers' stipends from $200 to $300 per week. Although a stipend increase was appropriate, it also means that more money will go to fewer projects, making it likely that the SEE Directorate will not be able to fund as many programs in FY 1991 as the currently proposed budget might suggest.

The ACS supports efforts in the Science and Mathematics Education Networks program that strengthens statewide initiatives designed to help foster the restructuring of precollege science education nationwide. As stated in the American Chemical Society report, ***Education Policies for National Survival*** (November 1989), the ACS believes that this restructuring effort also should include a significant role for the major scientific societies. For example, no redefinition of the scope and nature of precollege chemistry should take place without input from the American Chemical Society. The same is true for the other scientific disciplines. The Society hopes that this is the intent of this particular initiative.

At the college level, there is an urgent need to reexamine and revise entry-level science courses, both those designed for science majors and those taken to satisfy general requirements. More than half the young people who enter colleges and universities intending to major in science change to other, non-science fields--the majority after taking only one entry-level course. To quote the recent report, ***An Exploration of the Nature and Quality of Undergraduate Education in Science, Mathematics and Engineering***, developed by Sigma Xi (The Scientific Research Society), "Too much too soon about too little may contribute to the fade out of these students." Entry-level courses for non-science majors may be even less effective; they may be producing a body of "educated" voters who find science difficult, boring, and irrelevant.

The bulk of NSF funds for undergraduate course and curriculum development (which has doubled for FY 1991) is located in Research and Related Activities and not in the USEME subactivity under SEE. The FY 1991 request for the SEE Course and Curriculum Development program represents a significant increase only in percentage terms (from $4 million to $8 million), over the FY 1990 Action Plan. Taking all of this into account, the ACS still believes that more funds for undergraduate course and curriculum development should be made available to the SEE Directorate.

The Research Directorates are especially qualified to structure research activities for undergraduates, a legitimate and valuable activity available primarily to upper division students. On the other hand, the SEE Directorate is qualified to promote course and curriculum development in the entry-level years for both science and non-science majors. The Society would like to see such development focus on redefining and emphasizing the laboratory experience for all students, including those at two-year institutions. These institutions are the main gateway to careers in science for women and minorities. If only for this reason, these institutions should receive more attention in terms of course and curriculum development. The SEE Directorate also needs to support the development of programs which facilitate transfers from two- to four-year institutions.

The ACS notes that the $7 million increase in the Instrumentation and Laboratory Improvement program, which enables institutions to develop more effective approaches to laboratory instruction, applies to all types of institutions. Since this increase represents a transfer from Research and Related Activities, there is no overall increase in NSF support for instrumentation for instructional purposes. The Society believes there should be a real increase in this area, particularly for entry-level courses.

The American Chemical Society believes that the SEE Studies and Program Assessment subactivity should use additional funds in FY 1991 to examine the extent to which NSF has begun to realize its goals for undergraduate education as expressed in the March 1986 report of the National Science Board, ***Undergraduate Science, Mathematics, and Engineering Education*** (the "Neal Report"). Such funds would permit an evaluation of the effectiveness of both the USEME programs and the undergraduate programs located in Research and Related Activities. The Society also notes that there has been a small decrease in the percentage of funds available for undergraduate programs in the SEE Directorate relative to the total NSF funds available for undergraduate programs (from 37.8 percent in FY 1990 to 37.3 percent in the FY 1991 request).

An examination of NSF's figures for all education and human resource theme components in the FY 1991 request shows an increase of $106 million (30 percent) over FY 1990. Only $24.7 million of this requested increase (23 percent) is targeted at precollege programs in the SEE Directorate. While the Society recognizes the importance of strengthening NSF programs for the undergraduate and graduate levels, it trusts that this small increase for precollege programs does not accurately reflect a view that the crisis in precollege science, mathematics, and technology education is close to being solved, nor that it is a retrenchment in NSF's responsibilities as the lead government agency in this area.

RESEARCH AND RELATED ACTIVITIES

The Nation's academic research enterprise has a history of remarkable successes to its credit. Indeed, it is a model other nations seek to emulate. The Foundation provides essential funding for researchers at universities and at national facilities--a system whose success can be measured by the numbers of students our economic competitors send to the U.S. every year. Academic research provides more than a sound knowledge base and new insights at the frontiers of science; it also provides valuable experience and training for young scientists. Within Research and Related Activities (R&RA), there are programs or activities to fund facilities and major equipment, centers, renovation, fellowships, research instrumentation and maintenance, as well as research. Targeted research support is provided for women and minorities, high school students, and undergraduates, as well as for associated research equipment, and equipment for those with special needs.

Since the Administration announced its intention to double the Foundation's budget, resources have actually declined for NSF programs that competitively fund researchers and their students. Adjusted for inflation, nearly 60 of a total of 84 competitive programs in FY 1990 have absorbed significant reductions, many in the magnitude of 10 percent or more below their FY 1988 levels. Furthermore, the total FY 1991 request for Research and Related Activities ($1.95 billion) does not address the impacts of underfunding in previous years.

Within R&RA, the Foundation has targeted new funds toward education and human resources, facilities and major equipment, and centers initiatives. The ACS strongly supports NSF's education and human resource initiatives, as they provide research opportunities for underrepresented segments of society, and offer young people the chance to participate in the scientific enterprise. At the same time, pressure is being exerted on NSF's support for individual investigator grants through the funding of all these other initiatives. Increases for these initiatives, without commensurate growth in other areas, translates into minimal or negative growth for traditional research support. In fact, support for individual investigator research has declined from 86 percent of the total R&RA budget in FY 1988 to 77 percent in the FY 1991 request.

Despite the crucial role of academic research in the prosperity of the high technology sector of the economy, federal funding for university basic research has declined over the last ten years as a percentage of the Gross National Product (GNP). In particular, growth in federal funding for basic research in the physical sciences has been slow, increasing 3.4 percent per year between 1980 and 1988 (in constant 1982 dollars). Research conducted in the physical sciences has a direct impact on international competitiveness in high technology markets. The science community would like to see its growth correspond to that of the life sciences, which has increased at a rate of 6 percent per year between 1980 and 1988 (in constant 1982 dollars). These calculations are based on data from the ***Science and Engineering Indicators--1989*** report. NSF has a key role to play in rectifying this situation.

The health of basic research in all subdisciplinary areas must be nurtured in order to create a more stable research environment at universities. A healthy infrastructure is important if U.S. colleges and universities are to attract and retain university professors, many of whom are approaching retirement, and who are vitally needed to educate and train the next generation of science teachers and researchers. Consequently, the American Chemical Society urges Congress to fund Research and Related Activities at $2.20 billion in FY 1991, the level specified in the 1988 five-year authorization, in order to restore NSF's capability to adequately support quality research. Within R&RA, the ACS strongly urges that increased funding be directed to grants for the individual investigator.

CHEMISTRY, MATERIALS RESEARCH, AND CHEMICAL ENGINEERING

Within the U.S. economy, the "chemical and allied products" industries are among the few sectors that retain a favorable trade balance. In 1989, the U.S. chemical industry imported $20.8 billion in chemical products and exported $36.5 billion, thereby achieving a $15.7 billion positive balance of trade. This strong showing is related to the investment made by the federal government in past years in academic research in the chemical sciences. Yet, as David Bishop of AT&T Bell Laboratories put it, "There is this infatuation with competitiveness and manufacturing, but you can't do manufacturing before you understand the basic phenomena." Research in the interrelated fields of chemistry, materials research, and chemical engineering are connected to industrial needs, and communication between researchers and industry has been fruitful. This communication is an important factor in technology transfer, from academic research to marketable products.

NSF plays a key role in maintaining the vitality of federally-funded academic basic research: the Foundation currently provides 40 percent of federal funding for chemistry, 50 percent of all materials research supported by federal funds, and 84 percent of federally-funded research in chemical engineering. The Foundation funds roughly one-fifth of total federal R&D in chemistry, and 40 percent of federal support for chemistry at colleges and universities. However, the American Chemical Society sees a decline in the health of academic research in the chemical sciences and related fields. This decline must be arrested and reversed if the competitiveness of chemical and allied industries is to be maintained.

Chemistry Division

Due to marginal increases, funding for the Chemistry Division has declined dramatically in real terms. The FY 1990 budget for the Chemistry Division increased only 1.5 percent above FY 1989. In FY 1989, the Division's budget increased by only 3 percent above the preceding year. At the same time, inflation reached 4.6 percent in 1989, and is projected to reach 4.0 percent in 1990.

The average size of a grant awarded by the Chemistry Division is $84,000, and has not increased in three years. At the same time, costs for instrumentation and maintenance are accelerating. Researchers are being forced to expend greater portions of their grants to meet these needs, while overall funding is declining in real terms.

Of greatest concern to the Society is that the Chemistry Division will not be able to fund as many worthwhile projects as in the past, and those that it does fund will not receive sufficient support to maintain our world leadership in chemistry. In fact, the Chemistry Division's FY 1991 request is actually *less* in total dollars for FY 1991 than its request for FY 1990. Funding continues to be cut in real terms at a time when the need for support for individual investigators is greatest. The American Chemical Society urges that funds for the Chemistry Division be increased by a minimum of 10 percent, which represents a total budget of $107.7 million in FY 1991.

Materials Research Division

As with the Chemistry Division, the Division of Materials Research (DMR) in FY 1990 received a marginal increase of 1.6 percent above FY 1989. While DMR is slated to receive a significant increase in the Foundation's budget request, much of that increase will be directed toward a specific project--the high magnetic field laboratory. Meanwhile, pressure on individual investigator grants continues to grow. The materials research community has grown dramatically over the past few years. At the same time, federal funding for materials research from other agencies, particularly defense-related materials research, has increased minimally. This lack of growth will exert funding pressure on the community as a whole, and on DMR specifically.

The Society believes that all methods of funding within DMR--individual investigator grants, Materials Research Laboratories and Groups (MRLs and MRGs)--should be maintained at a level which provides adequate support for promising avenues of research. In order to begin to redress the negative impact of marginal growth in past years, the ACS believes the Division of Materials Research should receive $128.6 million in FY 1991, which represents a 10 percent increase over FY 1990.

Chemical and Thermal Systems Division

Research within the Chemical and Thermal Systems Division (CTS) focuses on strengthening the engineering base for technologies involving chemical, thermal, and flow processes. Research activities funded through CTS have major impact on microelectronics, commodity and specialty chemicals, pharmaceuticals, energy production and transfer, the molecular engineering of advanced materials, and chemical processing of hazardous waste.

CTS also supports special initiatives in conjunction with other NSF divisions. For example, CTS is working in conjunction with the Chemistry and Materials Research Divisions to investigate the chemical processing of materials, which may lead to improvements in manufacturing of microelectronic chips and thin film sensing devices.

The Society is concerned that CTS is being squeezed in the same manner as the Chemistry and Materials Research Divisions. Inflation, coupled with marginal growth over several years, has effectively reduced the buying power of CTS grants. As CTS supports chemical engineering research in the university community, where the bulk of innovative research is occurring, reductions in grant size inevitably lead to lost opportunities.

As basic research in chemical engineering continues to have a dramatic impact on technological advances leading to the development of new products and processes, the Society believes it is crucial to provide adequate funding to the academic research community. With that in mind, the Society recommends that the Chemical and Thermal Systems Division be funded at $33.7 million in FY 1991, which represents a 10 percent increase over FY 1990.

RESEARCH SUCCESSES

Research grants awarded by NSF have contributed to many exciting discoveries in areas such as chemistry, chemical engineering, and materials research which impact on the health of every sector of the U.S. economy. Promising research includes the work of Mark Wrighton of the Massachusetts Institute of Technology, who has synthesized molecular materials that function as switches in new kinds of transistors, and E. J. Corey, of Harvard University, who has discovered that small molecules with enzyme-like reactivity, dubbed "chemzymes," lead to highly efficient production of commercially useful, complex chemical products.

Chemical engineering research is exploring areas such as the production and characterization of uniform-size gallium arsenide in small clusters of the 5 to 20 nanometer range. Research on such clusters, called quantum dots because their small dimensions yield discrete electronic states, could lead to new electronic and optical components. Possible applications include semiconductor lasers of intensity several orders of magnitude higher than conventional diode lasers, and new electroluminescent display technology with convenient adjustment of color.

A team from the Cornell High Energy Synchrotron Source, Argonne National Laboratory, and Spectra Technologies, Inc., recently designed a magnetic device called an "undulator," which can be used to take x-ray flash diffraction patterns in millionths of a second, enabling scientists to capture and analyze very rapid changes in biomolecular and other materials. Undulators based on this prototype will have many more applications when installed at Argonne's Advanced Photon Source.

FUTURE RESEARCH DIRECTIONS

Several National Research Council (NRC) studies point to areas of research which, if enhanced, would lead to dramatic progress in the chemical sciences and engineering, and in materials science. As previously stated, research in these areas is crucial to maintain U.S. economic competitiveness in the high technology arena.

Chemistry and Chemical Engineering

In 1985, the National Research Council published a report entitled ***Opportunities in Chemistry***, also known as the "Pimentel Report," which examined how advances in the chemical sciences lead to progress in the development of new and improved materials and processes, energy sources, an improved food supply and human health, and a cleaner environment. The Pimentel Report recommends that funding for the Chemistry Division be doubled.

In 1988, NRC released a report on ***Frontiers in Chemical Engineering: Research Needs and Opportunities***, also known as the "Amundson Report." This Report examined research directions that would serve to ensure the development of emerging technologies, maintain leadership in established technologies, protect and improve the environment, and develop systematic knowledge and generic tools. The Report notes that additional emphasis is needed in priority research areas, and in support for chemistry as the vital research base for chemical engineering. Areas for additional emphasis (including new funding) are:

- biotechnology;
- electronic, photonic, and recording materials and devices;
- polymers, ceramics, and composite materials;
- energy and natural resources processing;
- environmental protection, process safety, and hazardous waste management;
- computer-assisted process and control engineering; and
- surface and interfacial engineering.

The American Chemical Society supports the recommendation of the Amundson Report, which calls for an increase of about $22 million over four years of growth, or an annual growth rate of approximately $4 million. This increase would be shared by several NSF engineering divisions, which have begun to implement some of the Report's recommendations. Additional contributions would be made from other Directorates in the case of cross-disciplinary research. These multi-disciplinary thrusts serve to reflect the close relationship between chemistry and chemical engineering.

Materials Science

The National Research Council published a report in 1989, entitled ***Materials Science and Engineering for the 1990s: Maintaining Competitiveness in the Age of Materials***, which recommends that the U.S. undertake a national initiative in materials science and engineering R&D. In order to preserve America's competitive position at the forefront of materials science, the Report urges that specific actions be taken by industry, academia, and the federal government.

Materials science and engineering is a remarkably vital area of research. Rapidly emerging scientific discoveries have impacted on the health of every major industry in the U.S. Federal and industrial investment in these endeavors have, for example, led to the development of new, light-weight composites of incredible strength for use in aircraft, fiber-optics for use in telephone and data transfer communication, and integrated circuitry leading to advances in computer technology. All these advances have had dramatic impacts on the Nation's economy, led to advances in defense technology, and created new opportunities for commercial growth.

The NRC Report cites research conducted by principal investigators, a mode of research in which the U.S. excels, as being a particularly important contributor to many of these innovations, as well as being highly cost effective. However, long-term trends indicate that support for materials research is declining in the U.S. In 1976, the federal government spent roughly $728 million for materials R&D, compared to $562 million in 1987 (figures are in constant 1982 dollars). Meanwhile, our competitors, particularly Japan and West Germany, have targeted specific areas of commercial materials science and engineering for increased investment.

The Report recommends that the four basic areas of materials research--**synthesis and processing, structure and composition, properties**, and **performance**--be incorporated into a national effort designed to maintain and increase our strong position in this field. Federal agencies should devote a portion of their materials science and engineering budgets to research and development of new instruments for analysis, and synthesis and processing of materials, including instruments that analyze processes in real time.

* * *

Science education and basic research are areas that have far-reaching consequences for the economy and for American society. The American Chemical Society is fully cognizant of the constraints facing the federal budget and their impact on funding increases for federal agencies. However, the increases recommended by the ACS are necessary to address the problems that exist relative to the numbers of students who pursue careers in the sciences, the level of scientific/technological literacy, and support for the Nation's research infrastructure. Without a healthy academic research enterprise and a scientifically literate population, the U.S. will not be able to remain a world leader in science and technology.

Senator MIKULSKI. Let me ask if Ms. Janet Shoemaker is here, representing the American Microbiology people?

[No response.]

Senator MIKULSKI. Well, Ms. Shoemaker is scheduled to testify. I know that we're running right on schedule and should she come, we'll move her into the other panel so any scheduled witness is not denied an opportunity to do that. In the meantime, without objection, Ms. Shoemaker's prepared statement will be inserted in the hearing record at this point.

[The statement follows:]

STATEMENT OF JANET SHOEMAKER

The American Society for Microbiology (ASM) appreciates the opportunity to submit comments on the Fiscal Year (FY) 1991 budget for the National Science Foundation (NSF). The ASM is the largest single biological life science society in the world with an active membership of over 37,000. Many of these individuals are engaged in biological research and a sizable number are recipients of grants administered by the NSF.

Each of the agencies under the jurisdiction of the HUD-Independent Agencies Subcommittee has its special characteristics and value. The unique value of the National Science Foundation lies in its support of basic science, its catalysis and support of interdisciplinary centers with focused goals, and its support of science education. Although far from the largest among the HUD-Independent agencies, and far from the largest federal R&D effort (only 3% of the whole), its value for the nation is critical. The health and prosperity of this small but vital agency must not be allowed to slide by default.

At a time when deliberate measures must be taken to prevent a decline in the world-wide role of the United States, we must recognize that the thrust and activities of the NSF are central to fostering vitality in areas most germane to national stature in technology. To be in a position to continue technological advances, we must underwrite basic scientific research, which yields new ideas and technological advances, and we must strengthen our technology base. Research needs support both at the level of the individual investigator and through coordinated research centers. We also must invest in quality science education to avoid the unhappy prospect of having too small a cadre of technically and scientifically trained Americans in the next generation who are able to function productively in a technically sophisticated society.

To translate support for such programs at the NSF into the reality of dollar and cents budgets, one needs to keep in mind that the FY 1990 budget, after a positive start, finished up with only a 6% increase over 1989, barely above inflation. To put the FY 1991 budget request in perspective, it is useful to look at where the Administration's proposal to double the NSF budget stands at present.

In recognition of years of budgetary erosion and falling behind, in 1987 the Administration proposed that we set a path of doubling the NSF budget in 5 years, by FY 1992. The Congress passed an Authorization Act which called for bringing the NSF budget to $3.5 billion by FY 1993. Appropriations for 1988, 1989 and 1990, however, fell significantly short of this course, forcing readjustment. The current Administration proposal recognizes that we have fallen short and has readjusted the time line, seeking now to double by 1994 (reminiscent of some other nations' periodic readjustment of economic goals). To reach the new goal of doubling by 1994, the Administration has asked for an appropriation of $2.383 billion for NSF for FY 1991, an overall increase of 14.4%. Authorization for FY 1991 is significantly higher, $2.782 billion. We urge that an effort be made to edge upward toward the authorization level to provide the necessary foundation for building a sound scientific base and technology in the U.S.

There have been significant erosions in NSF-supported individual research efforts in recent years, much greater than would be supposed by looking at the agency totals. Obligations, responsibilities and initiatives outside of the core support for investigator-initiated research grants have siphoned dollars away from that component of the budget. Examples of these factors are corrective measures for renewal of deteriorating research facilities, initiation of Science and Technology Centers, substantial increases in education efforts, major equipment items of purchase and renewal such as rebuilding the Greenbank telescope. Viewed from the perspective of the community of biological scientists, there has been little progress in support for core research, in fact there have been losses. Of 23 research programs in the Biological, Behavioral and Social Sciences, 14 have been cut in real dollar terms in the last two years, and the rest have hardly inched past inflation. According to an analysis of the Association of American Universities, the budget for most core research programs is so out-of-step that at the present rate of increase, a doubling will not be achieved by 1994, but only by 2020. We support the need for rebuilding the scientific infrastructure, for establishing a modest number of interdisciplinary research centers, for increasing the quality of science education, but we believe these activities should be supported through increased appropriations, not by siphoning away from core individual research programs.

Some of the practical achievements and goals of NSF-supported research in the Biological Sciences are: A powerful text scanning device that brings fast and economical sequencing of genomes closer to reality; safe and effective genetically modified organisms for agricultural applications such as pesticides; new adhesive materials from biological sources with new properties; and synthesis of biodegradable plastics by genetically engineered bacteria. Some of the research potential being actively explored includes: Potential for microbes to break down and eliminate undesirable pollutants and hazardous substances; potential for microbes to extract valuable minerals from low-grade ores and mining wastes; potential for custom designing therapeutic proteins of pharmaceutical value; and efficient microbial systems for large scale production.

In summary, the ASM asks that the subcommittee not overlook the large and important benefits to be gained by bolstering the efforts of the NSF. Infusion of money up to the authorized level of $2.782 billion could halt a position of chronic shortfall in the research area, could prepare a future generation of scientifically literate people, could support remarkable technological advances, and with a relatively small investment when one thinks of the entire federal budget, could ensure that the NSF will function as a vital force for American science.

RESEARCH AND UNDERGRADUATE EDUCATION

Senator **Mikulski**. I appreciate your testimony in talking about how research would be linked to undergraduate education. This, of course, is something that is very important to me. I think it's important to this country and it is something that often can escape some of the big research universities.

When we talk about research, we are not funding universities that are research institutes; we are funding universities. Therefore, the universities have an obligation as they pursue knowledge to strengthen our undergraduate base which, of course, is the pipeline for that.

I welcome those comments that have been made and the needs for hands-on experience.

OPPORTUNITIES IN SCIENCE

I have another question, since many of you represent important organizations and associations. Do you think the National Science Foundation has developed material that really communicates to guidance counselors, high school teachers, and so on, the opportunities that are available in science?

Dr. Gassman?

Dr. **Gassman**. I think in part they have. Certainly Dr. Shakhashiri has done a superb job of pointing out the opportunities that exist and the problems in the pipeline and just what a shortage there is going to be of scientists and engineers down the road. Also he has drawn, I think, very good attention to the fact that the economic rewards, as a result of this shortage, are going to be quite attractive. So I think the answer is "Yes."

Senator **Mikulski**. Anybody else want to comment?

Mr. **Johnson**. I don't have a lot to add to that, except to say that I think the science and engineering education directorate has identified that period of time as being one that it wants to concentrate resources on and it may be too early to see all the fruits of that, but I think the money is placed in the right area.

Senator **Mikulski**. Mr. Crowley, before you comment, I note that Dr. Moghissi is now here from the University of Maryland.

Doctor, we welcome you. You had a very able backup in Nelson Milder.

I know what it's like, though, to be a commuter to get here. So we welcome you and, as I ask this question, if you'd care to comment, sir, you'd be most welcome.

Mr. Crowley.

Mr. CROWLEY. Just briefly, Madam Chair, I would concur with what has been said and, when we consider the fact that not only are our colleges and universities facing the prospect over the coming decade of having to replace half of their faculty in the arts and sciences, the same is true of our elementary and secondary schools. Nationwide we have to replace roughly one-half of our teachers.

In that context, any steps taken by the National Science Foundation to provide leadership, to get the word out and to attract the very best students into those careers, I think is worth every dime spent.

Senator MIKULSKI. Do you think they're getting the word out?

Mr. CROWLEY. I think they certainly are trying to do that; I think they certainly can do a better job. We all can do a better job.

Senator MIKULSKI. Well, Dr. Moghissi, did you want to comment on that, sir?

Dr. MOGHISSI. Yes; but before I do, we are very proud to have one of our alumni chairing these proceedings. We are very proud of you. I am from the University of Maryland—Baltimore, and I understand you are a graduate of our university. We are very proud to have you here.

Senator MIKULSKI. The school of social work, class of 1965.

Dr. MOGHISSI. Yes; I did my homework before I came. We are very proud of you, ma'am. [Laughter.]

Senator MIKULSKI. You sound like the guy who gave me my orals. [Laughter.]

Dr. MOGHISSI. Yes; what little I heard, I certainly endorse. The fact is that we have a crisis of engineering and science in this country, I think there is no secret about it. In my judgment and in the judgment of the American Society of Mechanical Engineers, any support that would come to help with the development of the engineering profession, and science, as well, would be of course very welcome.

Senator MIKULSKI. Thank you, Doctor.

COORDINATION OF AGENCIES

Dr. JOHNSON. I think there's one other aspect I'd like to mention, and that is kind of a new movement toward trying to connect the various agencies that are doing something in the way of science education. I think that's a new enough attempt that it's hard to tell what's going to come of it. But I think it's important to connect the pieces at the Federal level.

Senator MIKULSKI. Well, a lot's going to come of it. This committee's going to expect a lot of it. Not only does this subcommittee feel that the role of promoting research and also enhancing science education in this country is the role of the National Science Foundation, but we're going to be looking to EPA; we're going to be looking to NASA. We have to use our money smarter and create a synergistic effect in this country to develop the people to develop the new ideas and, hopefully then, the new products.

It will be our intention that sometime in June, we will ask the agency witnesses to come back and focus on what they are doing in education in their own areas. The reason I asked the question I did, gentlemen, was twofold.

One, there are 16,000 school districts in the United States of America. The National Science Foundation, I think, has developed an excellent job in developing curriculums or model curriculums that can be used in elementary school and in secondary school.

DISTRIBUTION PROBLEM

What I find is a distribution problem. I, during Science Ed Week, asked teachers in Maryland, have they gotten the wonderful material? No; some had; some hadn't—uneven. So you have a lot of brainpower that went into it. So how would we do that?

The second problem I have is how boys and girls know what the opportunities are, even for scholarships, the nature of the kinds of jobs they would have, and so on. I'm talking now where, as a Senator, not only do I talk to organized groups but I talk a lot of moms and dads. Moms and dads who, I think, have one of the toughest jobs in this country. If you ask a dedicated dad now how he would be able to guide his son or daughter into thinking about jobs, what the scholarships would be, there is no one-stop shop where a mom or a dad can go to. They depend on college nights, even depending on the school. There's no place that they can write to that tells them other than the five basic programs that the Federal Government offers, but not in the areas often where there are special scholarships or so on.

I could elaborate on that. I see heads nodding on that.

Mr. Milder, did you want to comment? You see, I'm for the moms and the dads, because I believe Government cannot be a substitute for the family. But Government can certainly be a tool for the family to inculcate values and to communicate opportunities.

Dr. JOHNSON. I'd like to say that the AAAS has been working on that very problem for a number of years and has developed, I think in connection also with the Carnegie Foundation, materials that, I think, go a long way toward answering that question. But I think the distribution problem is still there.

Senator MIKULSKI. Doctor, did you want to comment, and then I think Mr. Milder?

Dr. MOGHISSI. Yes; but that's absolutely correct. There is one additional factor that is the core, in my judgment, of the problem; namely, the standing of science and technology in the society.

In my judgment, both the professional societies and the legislature of the country must work together to improve the standing of the science and technology. Environmental movements and other things have given technology a bad name, or science a bad name. We are often being called mad scientists. Of course, there are mads among us, but most of us are pretty decent people.

In my judgment, it takes leadership from everywhere to improve the standing. I deal quite a bit with both high schools at the undergraduate level, students, and in many cases, simply going into the field of science and engineering is often considered to be counterproductive to society.

STANDING OF SCIENTISTS AND ENGINEERS IN SOCIETY

In my judgment, things must happen to improve the standing of the scientists and engineers in the society as a whole.

Dr. **MILDER**. I would also like to say, Madam Chair, that engineering societies, such as ours, are very concerned about this problem and are initiating activities to see what, as professional engineering societies and educational societies, we can do to establish programs, either in cooperation with the Federal Government or in cooperation with the private sector or on our own, to see what we can do to stimulate greater interest in engineering and professional scientific and technology activities within our public schools.

Senator **MIKULSKI**. Well, I have an idea, if I could just share it with you. Of course I want to hear the comments of Mr. Crowley and Dr. Gassman.

I would hope that the professional organizations would work in their local communities because trickle-down is often not effective. But in local high schools right now, the idea of mentoring and coming to the physics club, the chemistry club, we might not be able to reach every boy and girl, but the idea that we could bring scientists in who would do that kind of mentoring and also work with the clubs, take them on field trips where you all work and do these interesting and exciting things.

INTERACTION BETWEEN STUDENT AND SCIENTIST

There's nothing like a young person meeting a scientist who talks with them and helps and then also gets involved in that direction.

Did you want to comment?

Mr. **MILDER**. I might also add that, for the past 3 years, I have been a judge in the science and engineering fairs of Fairfax County. I would agree with you 100 percent. These young people are eager. I've been judging students who have been participative from grades 7 through 12, and the interest that some of these students have is remarkable. The interest in talking and discussing with people like myself, who have professional backgrounds in this field, is most stimulating. We need to do more of that.

Senator **MIKULSKI**. Mr. Crowley, did you want to comment and then Dr. Gassman.

Mr. **CROWLEY**. I'm reminded of two things. At our meeting recently of some of our university presidents and chancellors, one of them stood and announced to the rest of the group that, in surveying what was going on in his own institution, he realized, and counted, more than 30—I think he said 39—discrete activities that have come up naturally involving his university's faculty at the departmental level, reaching out from that department to the local schools. He said this has come from the bottom up. A lot is going on and he was surprised when it all was cumulated and brought to him. So his institution spontaneously, as others are across the country, increasingly are involved with that.

The other comment I would make is rooted in my own experience many years ago as a college admissions officer. I was impressed as assistant director of admissions for a private, 4-year liberal arts college, at the incredible influence and power, in a sense, over the decisions exercised by high school guidance counselors and faculty and principals. I would encourage you to think about ways in which you could go beyond a good suggestion already made and see if you couldn't tap and bring to the attention of those professional groups their role and see if we could find ways to express to them the Congress' concern that, as guidance counselors and principals and faculty in our schools, they had better inform themselves and play their role in changing the mind set and recommendations that they have traditionally given students.

Senator **Mikulski**. Dr. Gassman?

OPPORTUNITIES NEED TO BE PRESENTED

Dr. **Gassman**. We need to bring the attention of the opportunities that exist to students from all directions. The Industrial Research Institute tells us that one-half of the scientists involved in research and development in the United States are either chemists or chemical engineers. So we have a lot of people out there.

The American Chemical Society has a biennial National Chemistry Week, and that's been very successful in bringing the benefits of chemistry to the attention of students. We also have a vigorous program of bringing the attention of chemistry students to our local sections, of which there are 183 scheduled throughout the country.

We've also written and published a textbook called "Chemistry in the Community," which is being used in many of our high schools. I think that no professional society can do it all. We need also attention to be paid to this topic by the top echelons of Government. People like yourself need to stand up and say, "We've got some real problems and we've got some real shortages coming and there's going to be some real opportunities."

I think we need—the President has been saying and I think he needs to say it louder. I think we need this to be brought to the attention of the public from every direction.

Senator **Mikulski**. Well, thank you. I couldn't agree with you more. We want to thank you for your testimony and this spirited exchange. We look forward to working with you.

I'm going to recess the committee now, subject to Senator Garn coming and taking up panel 11.

[A brief recess was taken.]

Senator **Garn** [presiding]. The subcommittee will come to order.

The next panel includes Frank Hamilton, National Association for Equal Opportunity in Higher Education; Mr. Stewart VanScoyoc from the Coalition of EPSCoR States; Herbert Eleuterio, Council on Chemical Research; Alvin Block of ESA; and Mr. Charles Maresca for the National Interrreligious Service Board for Conscientious Objectors.

We're happy to have all of you here.

Dr. Hamilton, if you'd like to begin.

STATEMENT OF DR. FRANKLIN D. HAMILTON, SCIENCE AND TECHNOLOGY ADVISORY COMMITTEE, NATIONAL ASSOCIATION OF EQUAL OPPORTUNITY IN HIGHER EDUCATION

Dr. **Hamilton**. Thank you, Mr. Chairman. I am pleased to have this opportunity to present testimony on behalf of the National Association for Equal Opportunity in Higher Education, Committee on Science and Technology.

I'd like to acknowledge the presence of my colleague, Dr. Vijaya Melnick, who is professor of biology at the University of the District of Columbia. I am professor of chemistry and director of the division of sponsored research at Florida A&M University.

I have a written testimony which I've given to staff that I'd like to have entered into the record.

I'd like to give a few words, excerpts from the testimony, and begin by presenting——

Senator **Garn**. Let me just interrupt you to say that all of your full statements will be printed in the record.

Dr. **Hamilton**. Thank you.

DISSEMINATION OF INFORMATION TO STUDENTS

I'd like to present a few comments on a question that Senator Mikulski asked to the previous panel, about the dissemination of information to students about opportunities for careers in science. I think a number of programs that the National Science Foundation have will help present those opportunities to students. Some of the information I have in my testimony presents that data.

For example, the MSRS Program, the Access Program the National Science Foundation has just introduced through our solicitation for a program called Alliances for Minority Participation in Science Program. These programs bring together coalitions between universities, high school districts, and industry and corporations involving high school counselors and parents. I think, utilizing networks that universities can set up and the faculty expertise in these areas is an excellent way of disseminating information, both to junior high school, high school students, as well as elementary school students, about the opportunities available for them in science, and also the needs available for them in the sciences.

One of the items we presented in our testimony is that these programs are funded to a very limited extent. For example, the MSRS Program is funded to a level of $6 million and supports six centers throughout the country. Most major metropolitan areas could benefit from this type of program and we suggest that the appropriations for these types of programs be increased.

FACILITIES PROGRAM

One other issue that we would like to address in our testimony is that of the facilities program. We are very appreciative to this committee for the leadership provided in acquiring the $20 million appropriation for the Facilities Modernization Program that the Foundation has announced. From the announcement the Foundation has received approximately 425 phase I proposals from university and nonprofit organizations throughout the country to enhance the scientific facilities.

The Foundation just completed their review of these proposals last week and, of those that were reviewed, 175 institutions were invited to submit a phase II proposal, which gives additional detail in terms of the facilities upgrading that will be required or requested, as well as additional evaluative information.

Because of the limited amount of funds, the Foundation is using appropriations from 2 fiscal years, totaling some $40 million. The staff at the Foundation estimates that only one-third to one-half of these 175 proposals will be funded. We hope that—we would urge the committee to give careful consideration to possibly increasing the allocation for this program, recognizing the dire need and the fact that the Federal Government has not, to a large extent, provided facilities money over the past 20 years. University facilities are in dire straits and are very essential to our producing scientists and engineers for the year 2000 and above.

In closing, let me just comment on another statement that was made in the previous panel. That is the need for faculty-initiated research support that is provided by the Foundation. The data in the most recent issue of Science magazine indicated that the level of investigator-initiated grants has increased—the annual level has increased from $68,000 in 1985 to $61,000 in 1989.

The investigator-initiated grant programs are suffering from a shortage of moneys. These moneys are used to support graduate students and we feel that they are very important to the fabric of the university support of graduate education, and we would urge the committee to give close attention to that particular need.

Again, thank you very much for the presentation.

Senator **Garn**. Thank you, Doctor, and I apologize to all of you for the limited time, but each year when we get into the public witness phase, there's so many that wish to testify. That's why I emphasize your full statements will be placed in the record.

[The statement follows:]

STATEMENT OF DR. FRANKLIN D. HAMILTON

Thank you Madam Chair, for the opportunity to present testimony addressing science and engineering programs at the National Science Foundation on behalf of the National Association for Equal Opportunity in Higher Education (NAFEO). NAFEO is an organization that represents 117 Historically Black Colleges, 2-year and 4-year public and private institutions including graduate and professional schools located in twenty four state, the District of Columbia and the Virgin Islands.

According to a recent Congressional Research Service Report (Historically Black Colleges and Universities and African-American Participation in Higher Education, CRS-LC, 89-5888 ROC, 1989), HBCU's constitute 3% of the nearly 3600 higher education institutions in the U.S. but enroll 27% of all Black students in 4-year higher education programs, and grant some 30% of all baccalaureate degrees awarded to African-American students. A review of NSF doctoral recipient data by Dr. James Jay, Professor of Biology at Wayne State University showed that three Black Institutions produced 25% of the Black Ph.D. recipients in the life science for the period 1980-85 (personal communication).

The contribution of HBCUs is further demonstrated by NAFEO data which show that two Black college account for some 40% if all Blacks earning degrees in dentistry, and 22% of all Blacks in medicine, four institutions account for 16% of all Blacks in law and one University accounts for 82% in veterinary medicine. These data are a testament to the important role of these institutions in providing talented minority personnel for the country's workforce.

I am confident Madam Chair that we all agree that a vital aspect of our efforts to improve this country's economic competitiveness is the existence of a capable scientific and technological workforce. In addition, we all are aware of the predicted short fall of an adequate number of trained science and engineering personnel by the year 2010. As part of an effort to reverse the current trend of declining interest in and preparation of students for careers in science and engineering, numerous bills have been introduced in the House and the Senate that will, among others, address such concerns as the:

- inadequate chemistry and physics course offerings in many of the country's high school,
- inadequate numbers of qualified teachers to teach science courses at both the K-6 and the high school levels,
- inadequate representation of minorities among the current science and engineering workforce, and
- the increasing percentage of minorities and women who will enter the workforce over the next twenty years.

Existing as well as newly initiated programs within the National Science Foundation can and will make significant contributions to improving students interest in and preparation for science and engineering careers and should also provide for an increase the total number of entrants into these areas. For this reason, we support the administration's FY 1991 request of $2.38 billion for the National Science Foundation programs and the 5 year goal of doubling the NSF budget. We desire however, to express some concern to the fact that less than 0.5% of funds in the NSF budget reach programs in HBCUs (ibid). We feel that this low level of funding of science programs in HBCUs is unacceptable, given the number of science and engineering degrees these institutions produce (NSF data show that five HBCU engineering schools were among the top seven producers of bachelor degrees to Black students in 1989, personnel communication, Joe Danick, NSF). NAFEO representatives have been, and will continue, to work with the NSF Director and staff in an attempt to bring funding levels in line with the ability of these institutions to contribute to the science and engineering workforce.

The President's Task Force on Women, Minorities and the Handicapped in Science and Technology issued a Final Report (1989) which contains action items that are designed to enhance this country's position in the production of science and engineering personnel. Those action activities targeted for the federal government include the following:

- use of their research and development programs to bring about a more diverse world class science and engineering workforce. Programs should affect pre K-12 education, higher education, research and development awards and employment.
- Continue to hire and advance talented scientists and engineers, including those from underrepresented groups,
- Provide stable and substantial support for effective intervention programs that graduate quality scientists and engineers who are members of underrepresented groups.
- Collect and maintain data to evaluate the participation of minorities, women and persons with disabilities in their research and development programs.

As the National Science Foundation was a major participant in the post-sputnik era in efforts to increase this country's R&D facilities and personnel, we feel that this agency is currently poised to address the challenges as set-forth in the President's Task Force report. Thus we suggest that a portion of the FY 1991 $106 million increase requested for Education and Human Resources should be used to double the FY 90 appropriations for the ACCESS program to give a FY 91 appropriations level of $22 million and to increase the FY 91 appropriations for the RCMS program to $12 million. Both of these programs promote the formation of collaborative efforts between multiple educational institutions and agencies as well as industry and have proven to be effective models which facilitate the recruitment and training of greater numbers of students in science and engineering fields.

This year the administration has requested $20 million for the Academic Research Facilities Modernization Program, 10% of the FY 1991 authorized level of $188 million. An indication of the critical need for the upgrade in existing research facilities in our Universities and Colleges is indicated by the rapid response to the Solicitation for Requests for Repair/Renovation of Research/ Training Facilities issued by NSF in December, 1989, with a response due by February, 1990. This solicitation generated:

- 425 Phase I (preliminary) proposals requesting over $318 million,
- an average proposal size of $725,000,
- the receipt of proposals from all 50 state plus D.C., Puerto Rico, Guam and Bermuda,
- over 90% of the proposals were from educational institutions, and
- some 54 proposals were from minority institutions requesting nearly $30 million.

The staff of the Foundation has complete the review, via peer review panels, of the Phase I proposals and the following number of institutions were invited to submit Phase II proposal. A total of $130 million has been requested by the 175 institutions that have been invited to submit Phase II proposals. Over 25 of these institutions are Historically Black Colleges with proposals in excess of $13 million. NSF expects that only one-third to one-half of the Phase II proposals will result in awards.

This data indicate the tremendous need to replace aging research facilities in all institutions and we urge the Senate to increase the FY 91 appropriations for the Facilities Program to $40 million.

Before closing, let us address another concern about the NSF budget which will affect future manpower needs. Graduate students in science and engineering are trained in research laboratories of University faculty, many of whom have research grants provided by NSF. Research grant support is an essential component of graduate education. Yet, we find that faculty research grant support is increasingly more difficult to obtain and maintain. NSF data (Science 248 p541-543, 1990) show that the annual award for NSF grants has decreased in constant dollars from $68,000 in 1985 to $61,700 in 1989 and that the aggregate of individual investigator support in the NSF budget has decreased from 68% in 1980 to 58% in 1990. If faculty are impeded in their ability to acquire research support, the production of Ph.D. level personnel will be adversely affected. We suggest that the Congress should take a careful look at value of investigator initiated research support for the production of Ph.D. level personnel needs.

As indicated the earlier portion of this presentation, we feel that the National Science Foundation is strategically positioned to offer the programs that will address the science and engineering personnel needs for the years 2000 and beyond. We have mentioned only a few programs of those currently in place and proposed by the Agency. We urge the Congress to allocate the resources that will allow NSF to fully implement all of its programs and thereby help maintain the economic and technological status we have attained within this century.

STATEMENT OF H. STEWART VANSCOYOC, COALITION OF EPSCOR STATES, EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH

COMPETITIVE RESEARCH

Senator GARN. Mr. VanScoyoc?

Mr. VANSCOYOC. Thank you very much, Senator Garn.

We appreciate the opportunity you've given us to testify this morning. The Coalition of EPSCoR States was formed approximately 1 year ago to work in support of the concepts embodied in the National Science Foundation's experimental program to stimulate competitive research or EPSCoR.

The National Science Foundation established EPSCoR in 1979 for the purpose of developing the capacity of scientists and institutions in eligible States to compete more successfully for Federal research funding from NSF and other Federal agencies. The EPSCoR approach involves a coordinated statewide planning effort designed to establish programs which will lead to the development of areas of research excellence within each State. Since 1979, 16 States and Puerto Rico have been designated by NSF as eligible for participation.

DISTRIBUTION OF RESEARCH DOLLARS

Presently, Federal research funding is concentrated in relatively few States and regions of the Nation. I believe you have some charts attached to the written testimony up there. As you can see from chart I, the 16 EPSCoR States and Puerto Rico, while containing 13 percent of the population, receive only 5.6 percent of Federal research and development dollars. In contrast, the top five research States, with 27.9 percent of the population, receive about 45 percent of Federal research and development dollars.

It is not surprising, therefore, in fact it may be related, that the EPSCoR States tend to have a per capita income that is lower than the national average, as shown in chart II. The EPSCoR experiment, while funded at only one-fourth of 1 percent of the NSF budget, was designed as a first-step in addressing this disparity. The result has been a significant improvement in State support for research and development in the EPSCoR States.

As you can see from charts III and IV, Federal support, as a percent of total spending for research and development at our research universities, continues to lag significantly behind both the national average for Federal support and the percentage of support provided to the top five States. On the other hand, State support in the EPSCoR States is twice the national average.

Undergraduate and graduate students in EPSCoR States are also denied access to the array of research experience and laboratories found in those States receiving high levels of Federal support. As a result, fewer students in EPSCoR institutions have Federal fellowship awards. Table I gives the breakdown of these awards by State. As unbelievable as it may seem, the 17 EPSCoR States receive only 1 percent of the fellowship awards. Table I also shows that EPSCoR States also receive only 7 percent of science education program grants.

We make several suggestions in our testimony to continue to address and build on the experience of the EPSCoR Program and to apply it to other agencies.

Again, thank you very much.

[The statement follows:]

STATEMENT OF H. STEWART VAN SCOYOC

INTRODUCTION.

Mr. Chairman and Members of the Subcommittee, we appreciate the opportunity you have given us to testify this morning. The Coalition of EPSCoR States was formed approximately one year ago to work in support of the concepts embodied in the National Science Foundation's Experimental Program to Stimulate Competitive Research (EPSCoR).

The National Science Foundation established EPSCoR in 1979 for the purpose of developing the capacity of scientists and institutions in eligible states to compete more successfully for Federal research funding from NSF and other Federal agencies. The EPSCoR approach involves a coordinated state-wide planning effort designed to establish programs which will lead to the development of areas of research excellence within each state. Since 1979, 16 states and Puerto Rico* have been designated by NSF as eligible for participation.

With the support of this Committee, for which we are grateful, the Federal government has invested $49 million in this program over the last 10 years. This has in turn led to non-Federal contributions of $156 million as well as a substantial improvement in the research environment in these states.

By this statement we request this Subcommittee's support for the following programs for FY 1991:

AT NSF:

1. Allow full indirect cost recovery for EPSCoR grants--estimated cost $4 to 5 million.
2. Establish 300 EPSCoR Graduate Traineeships ($18,000 each, competitively awarded) --$5.4 million
3. Establish 400 EPSCoR Undergraduate Traineeships ($5,000 each, competitively awarded) -- $2.0 million
4. Science Lab Exposure Program, Grade K-12 --$5.0 million

At NASA:

1. Support Administration Request for Phase II, Space Grant Colleges
2. Establish Competitive Research fund for Phase II Space Grant Colleges $2.0 million

At EPA:

1. 100 EPSCoR Graduate Traineeships at $18,000 each--$1.8 million
2. Planning grants for EPA EPSCoR program -- $1.7 million

Characteristics of the EPSCoR States.

Research.

Presently, Federal research funding is concentrated in relatively few states and regions of the nation. As you can see from Chart I, the 16 EPSCoR states and Puerto Rico, while containing 13% of the United States population, receive only 5.6% of Federal research and development dollars. In contrast, the top five research states, with 27.9% of the population, receive

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*Alabama, Arkansas, Idaho, Kentucky, Louisiana, Maine, Mississippi, Montana, Nevada, North Dakota, Oklahoma, Puerto Rico, South Carolina, South Dakota, Vermont, West Virginia and Wyoming.

44.5% of Federal research and development dollars. It is not surprising, therefore, -- in fact it may be related, -- that the EPSCoR states tend to have a per capita income that is lower than the national average and substantially lower than the top five research states. This is shown in Chart II.

The EPSCoR experiment, while funded at only one-quarter of one percent of the NSF budget, was designed as a first step in addressing this disparity. The result has been a significant improvement in state support for research and development in the EPSCoR states. As you can see from Charts III and IV, Federal support as a percent of total spending for research and development at our research universities continues to lag significantly behind both the national average for Federal support and the percentage of support provided to the top five states. On the other hand, state support in the EPSCoR states is twice the national average.

Science Infrastructure and Human Resources.

The low level of Federal funding to EPSCoR states not only impacts adversely on the economy of these regions, but also wastes resources critical to the nation.

The talented scientists and engineers in these states are not receiving support to maintain the infrastructure necessary to be fully productive, either in research or in the development of human resources. Through the indirect cost recovery allowed on research grants, the Federal government supports state and institutional infrastructures. Those indirect costs, which deserve Federal support, range from 40 to 80 plus percent of the amount of the award. Currently state EPSCoR committees are expected by NSF to waive indirect costs. Therefore, we are requesting sufficient additional funds this year to put EPSCoR awards on an equal footing with other Federal research support.

Undergraduate and graduate students in EPSCoR states are also denied access to the array of research experience and laboratories found in those states receiving high levels of Federal support. As a result, fewer students in EPSCoR institutions have Federal fellowship awards. Table I gives the breakdown of these awards, by state, for FY 1989. As unbelievable as it may seem, the 17 EPSCoR states receive only 1% of the fellowship awards. Table I also shows that EPSCoR states receive only 7% of science education programs grants.

EPSCoR states are characterized by excess training capacity. The number of science and engineering students, undergraduate and graduate, receiving a quality science and engineering education in these states could be greatly increased, without expanding the number of faculty or constructing new facilities. Consistent with the policy recommendations of the Office of Technology assessment in its report Educating Scientists and Engineers: Grade School Through Grad School, we recommend a renewal of the highly successful "National Defense Education Act" type programs, created after the launch of Sputnik, aimed at providing additional funding for a comprehensive, competitive, initiative in EPSCoR states for graduate traineeships, undergraduate traineeships and science lab experiences for grades K-12. Such a program would cost about $12.4 million or $730,000 per state.

Initiating an EPSCoR Program at NASA and EPA.

Mr. Chairman, it is now time for a serious government-wide, systematic effort to broaden this Nation's research base, and we believe that the EPSCoR approach, as developed and refined by NSF for over 10 years, is the best way to proceed. We are not alone in this view; Dr. D. Allan Bromley, the President's Science Advisor, and Mr. Erich Bloch, the NSF Director, have expressed specific support for having the EPSCoR model adopted by other departments. We would also note that the Association of American Universities (AAU) and the National Association of State Universities and Land-Grant Colleges are both on record in this regard.

NASA has begun such an initiative, through Phase II of its Space Grant College initiative. We strongly endorse their budget request for that program. In addition, as the Space Grant College initiative is solely an infrastructure program, we would urge that the Committee create an additional incentive for participation in that program by establishing a pool of research funding, to be awarded competitively to those institutions participating in Phase II.

At EPA, we would urge the Committee to consider creation of 100 EPSCoR graduate Traineeships in the environmental sciences. Additionally, we would further urge the Committee to support a program of $100,000 planning grants for EPSCoR states to work with EPA on eliminating barriers to successfully competing for EPA research grants.

CHART I

COMPARISON OF POPULATION AND FEDERAL R & D $$ AS PER CENT OF THE U.S. TOTAL

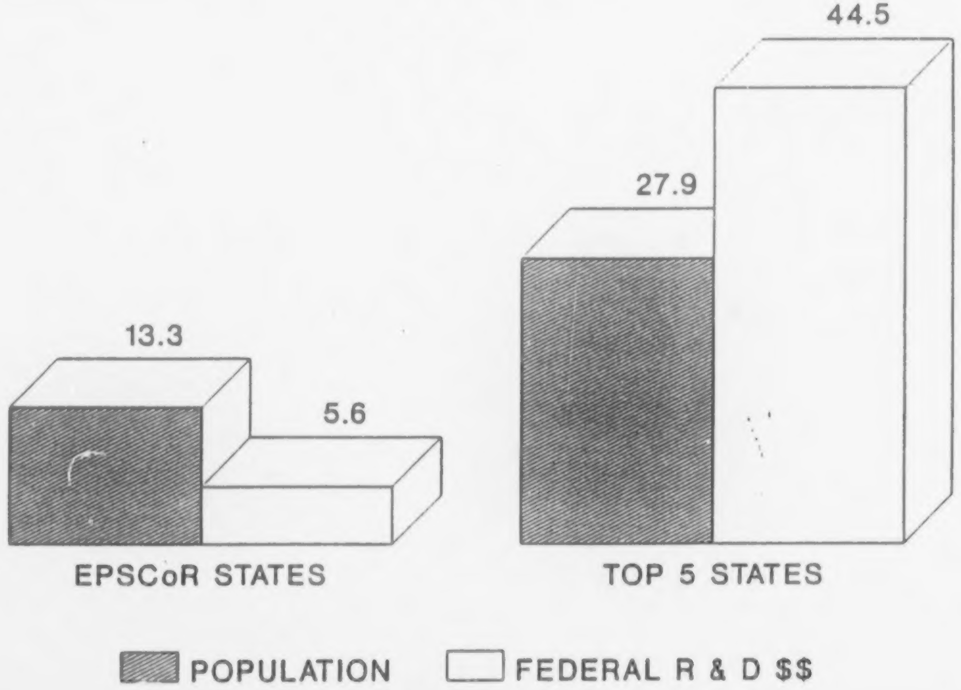


CHART II

PER CAPITA INCOME, 1988
PER CENT OF NATIONAL AVERAGE

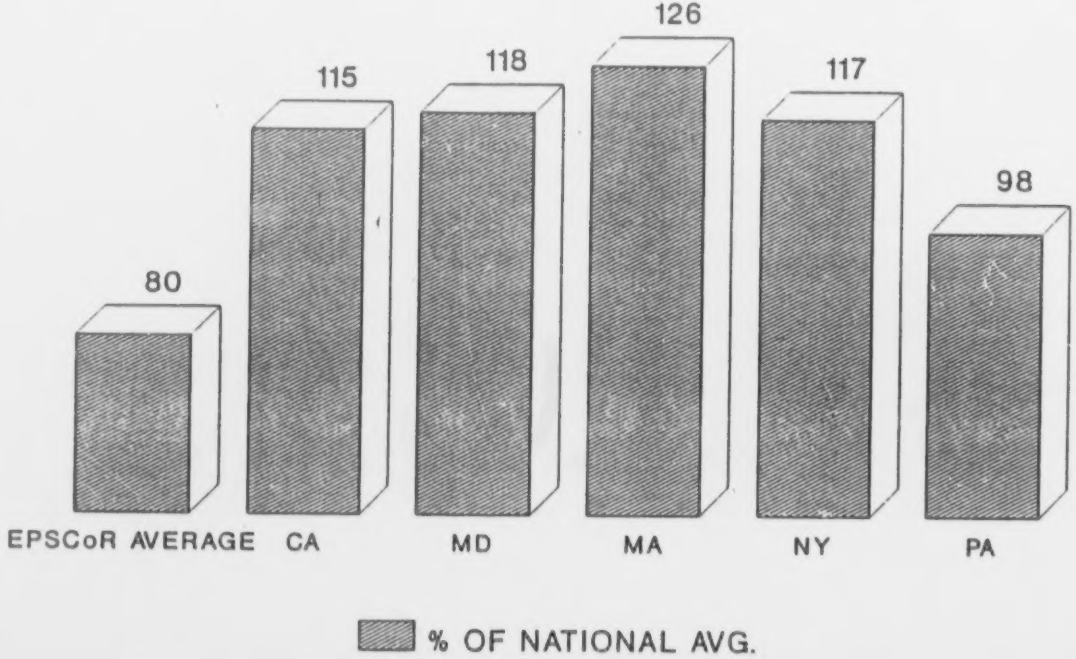


CHART III

PER CENT OF TOTAL 1988 R & D SPENDING PROVIDED BY FEDERAL GOVERNMENT

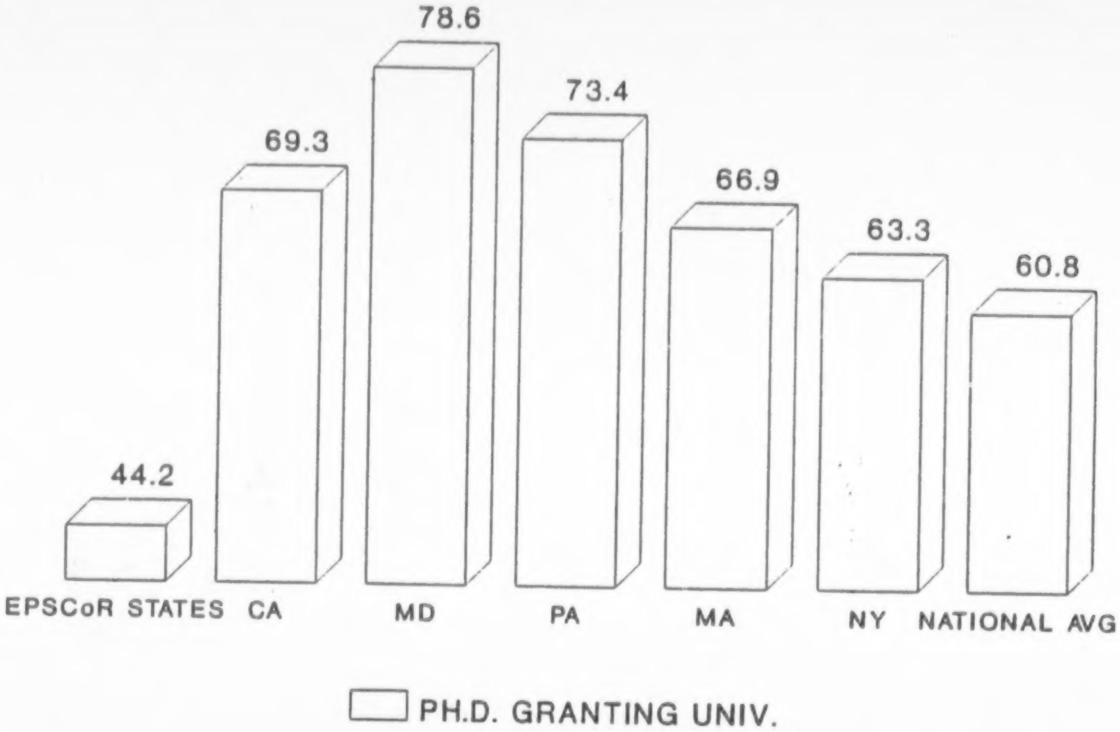
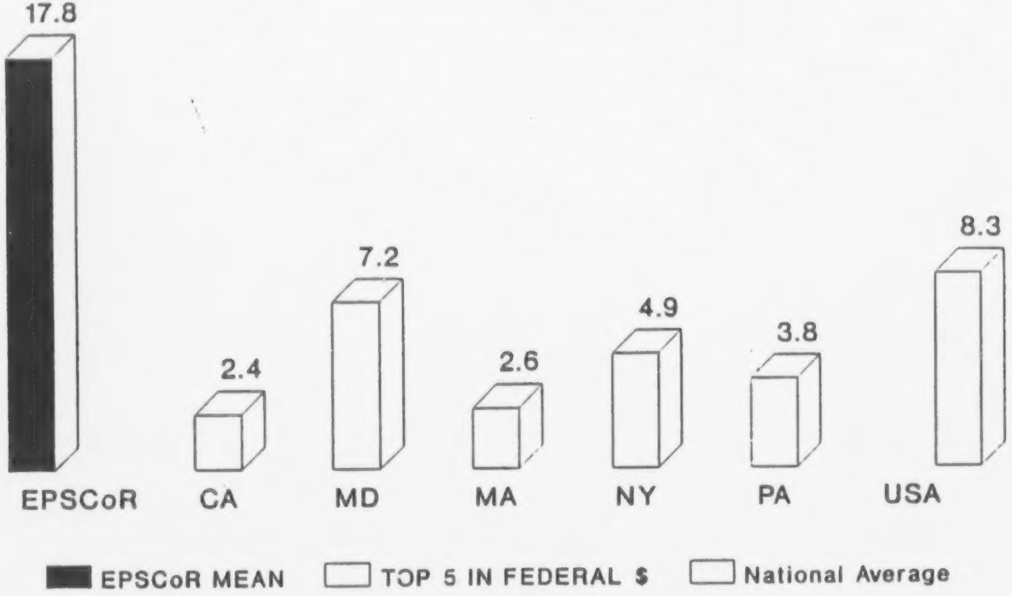


CHART IV

RESEARCH AND DEVELOPMENT SPENDING BY DOCTORATE-GRANTING UNIVERSITIES FY 88

% FUNDS FROM STATE AND LOCAL GOVERNMENT



Source: National Science Foundation

TABLE I

FISCAL YEAR 1989 PROGRAM GRANTS AND CONTRACTS AWARDED AND FELLOWSHIP AWARDS FROM SCIENCE AND ENGINEERING EDUCATION ACTIVITIES APPROPRIATION

SUMMARY (Amounts in Thousands of Dollars)	PROGRAM GRANTS AND CONTRACTS (Including Fellowships)		FELLOWSHIPS (Number of Fellows Supported)
	No.	Amount	
Alabama	14	677	2
Alaska	7	238	1
Arizona	24	3,278	14
Arkansas	13	726	
California	131	20,513	693
Colorado	35	4,616	21
Connecticut	21	2,793	45
Delaware	6	131	5
District of Columbia	61	9,654	3
Florida	30	4,195	13
Georgia	27	2,986	22
Hawaii	8	537	2
Idaho	8	189	1
Illinois	53	7,381	110
Indiana	41	3,193	30
Iowa	21	1,461	8
Kansas	12	1,235	2
Kentucky	19	983	2
Louisiana	21	1,633	3
Maine	13	543	2
Maryland	33	2,968	34
Massachusetts	87	15,649	362
Michigan	60	6,163	77

SUMMARY (Amounts in Thousands of Dollars)	PROGRAM GRANTS AND CONTRACTS (Including Fellowships)		FELLOWSHIPS (Number of Fellows Supported)
	No.	Amount	
Minnesota	54	3,421	20
Mississippi	18	1,265	1
Missouri	21	2,444	16
Montana	10	927	1
Nebraska	12	516	1
Nevada	5	54	
New Hampshire	7	382	2
New Jersey	24	4,408	72
New Mexico	10	378	6
New York	121	19,542	137
North Carolina	32	3,985	39
North Dakota	6	81	
Ohio	43	3,846	21
Oklahoma	14	1,151	3
Oregon	17	1,203	7
Pennsylvania	74	9,280	82
Rhode Island	13	667	6
South Carolina	18	745	7
South Dakota	7	316	
Tennessee	20	3,008	6
Texas	46	4,433	46
Utah	9	826	9
Vermont	10	580	

SUMMARY (Amounts in Thousands of Dollars)	PROGRAM GRANTS AND CONTRACTS (Including Fellowships)		FELLOWSHIPS (Number of Fellows Supported)
	No.	Amount	
Virginia	38	3,414	17
Washington	29	4,243	44
West Virginia	8	441	
Wisconsin	41	4,980	52
Wyoming	11	430	1
UNITED STATES TOTAL:	1,463	168,767	2,048
FEDERAL GOVERNMENT TOTAL:	1	20	
U.S. POSSESSION TOTAL:	14	1,036	
FOREIGN COUNTRIES TOTAL:	25	375	
GRAND TOTAL:	1,503	170,139	2,048

STATEMENT OF DR. HERBERT S. ELEUTERIO, CHAIRMAN, GOVERNING BOARD, COUNCIL ON CHEMICAL RESEARCH

Senator GARN. Dr. Eleuterio?

Dr. ELEUTERIO. Senator, I am testifying today as chairman of the governing board of the Council for Chemical Research.

The council, whose 266 members all hold leadership positions, either in the chemical industry or the national laboratories or on chemical and chemical engineering faculties, contributes to U.S. competitiveness by promoting university, industry, and Government collaboration in research and education.

Now, toward this end, Senator, what CCR is asking you and the subcommittee to do is to increase the research and related activities portion of NSF's 1991 budget by $246 million and the science and engineering education portion by $49 million.

Now, why should you take CCR's request for increased funding seriously? A detailed answer to this question can be found in a book entitled, "Made in American," written by a multidisciplinary team of MIT scientists, engineers, and economists. Of all the reasons cited in the MIT study, there are really two reasons why you and your subcommittee should consider increasing NSF's budget request.

REASONS FOR SEEKING BUDGET INCREASE

One reason involves the pivotal role of advance materials on future U.S. productivity, while the other reason concerns the timely supply of people with the talent and skills required to function in a technology-driven world. Societal observers agree that society has entered the age of materials. Some of these observers are convinced that progress in the material sciences will determine the ultimate limit on the rate at which key sectors of the world economy can grow.

Users of materials not only expect more but also demand more and more exacting performance from materials. These demands can only be met by either tailoring materials or, more likely, tailoring combinations of materials to a specific function within the total operating system. Advances in information-rich surface science tools have enabled scientists to design and build such systems.

COLLABORATION ILLUSTRATED

Now, the Center for Photo-Induced Charge Transfer at the University of Rochester is but one of several examples of how NSF research funds make possible collaboration between university scientists and their industrial counterparts. The research conducted by the center emphasizes the important link between science and technology by permitting investigators at Eastman-Kodak, the Xerox Corp., and the University of Rochester to cooperatively study how light drives important chemical processes.

Ultimately, this research is expected to impact a variety of information-transfer systems, such as copiers, data storage media, and photographic film. Funds provided by the Foundation have made possible the acquisition and development of state-of-the-art instrumentation not previously available.

The center provides a new research and teaching resource for students at all levels. Participation in the activities of the center will culminate in the development of innovative professionals, who are themselves well-qualified to carry out research with a far different perspective than students educated in conventional graduate programs.

The unique attractions of this particular center have made it possible to recruit outstanding postdoctoral and graduate students into these joint university/industry projects.

PEOPLE ISSUE

Now, let us turn to the other example of how NSF is facing up to the U.S. competitiveness challenge—the people issue. Our public education system is not doing its job in preparing our Nation's work force to enter a technology-driven work world. Almost daily the weaknesses of our educational system show up in our newspapers.

In our judgment, the problem and it's solution is a grassroots issue. The National Science Foundation's K-to-16 private sector partnership tackles the problem head-on. The NSF program has been structured in a way that demands that the private and public sectors work together at the grassroots level. These initiatives are multipronged attacks aimed at improving the scientific literacy of the man on the street, enhancing the competence of science and math teachers, and attracting bright youngsters into technically oriented fields.

Bassam Shakhashiri and his NSF staff have done an outstanding job of leveraging taxpayers' dollars and should be commended for their efforts.

In conclusion, Senator, the Council for Chemical Research hopes that these comments will be useful in your deliberations.

I thank you very much for the opportunity of testifying before your subcommittee as a friend of science and technology.

Senator **Garn**. Thank you.

Mr. Maresca?

SELECTIVE SERVICE SYSTEM

STATEMENT OF CHARLES A. MARESCA, JR., STAFF ATTORNEY, NATIONAL INTERRELIGIOUS SERVICE BOARD FOR CONSCIENTIOUS OBJECTORS

Mr. **Maresca**. Thank you, Mr. Chairman. I am staff attorney for the National Interreligious Service Board for Conscientious Objectors, which is an association of 30 denominations and national religious groups which was formed 50 years ago and which exists to defend and extend the rights of conscientious objectors to military service.

MENTAL ANGUISH STANDARD

For the past 4 years, NISBCO has been offering testimony about the no rest or peace mental anguish standard, which the Selective Service System plans to use in judging conscientious objector claims in the event of a return to national conscription. NISBCO deeply appreciates the concern which this committee has already demonstrated for the problem this test presents for conscientious objectors.

In our written testimony, we have again outlined the problems of this illegal and speculative test, as well as some of the history of this language, which originates in the historic case of *Welsh* v. *the United States*. With the Chair's permission, I'll avoid recitation of this outline and history.

Last year Congress required the Selective Service to provide a report showing that its definition conforms to Federal case law. In his letter of response, dated March 13, 1990, the Director of Selective Service admits that mental anguish test is one of several considerations which local board members are trained to use to judge conscientious objector claims. The Selective Service training manual tells the board member that the conscientious objector must identify and describe the mental anguish that would result from participating in war.

"CLAY" DECISION

The use of this standard is wrong as a matter of law. The Supreme Court has consistently stated that the conscientious objector has to present a properly stated CO claim. It is then up to the local board to find some basis in fact for finding that the claimant is not opposed to war in any form, or that the claim is not based on religious, moral, or ethical beliefs, or that the claim is somehow insincere. This is the standard which the U.S. Supreme Court used to decide *Clay* v. *the United States* in 1971, and we note that the Director agrees in his letter to Senator Byrd that the *Clay* decision is a useful brief summary of applicable law.

As we told this committee last year, in our research we could find only two cases in which this no rest or peace standard was placed in issue. In both cases, the courts ruled that the use of this standard was impermissible. These cases were decided in the light of *Welsh*. Selective Service is wrong in its statement that its requirements for conscientious objectors are faithful to current Federal case law.

The Director also incorrectly states that his agency's regulations do not require the use of this no rest or peace standard. That standard appears at 32 CFR 1636.8(b). The regulations states:

> The registrant's stated convictions should be a matter of conscience which would give him no rest or peace should he participate in war.

We urge this committee to direct that this regulation be revoked or, at the least, that funds for Selective Service be withheld until this regulation is revoked and every member of every local board notified of the revocation.

NISBCO believes that there is strong evidence that the Selective Service System is currently incapable of carrying out what remains of its mission. We suggest that at least the draft registration program be defunded. Defunding would also save the hidden cost of draft registration, large amounts of money that the Selective Service Public Information Program requires, principally responding to requests for information generated by the Solomon amendments restrictions on Federal and State financial aid, Federal employment, and similar State programs.

This concludes our remarks.

Thank you for the opportunity to testify.

Senator GARN. Thank you very much.

[The statement follows:]

STATEMENT OF CHARLES A. MARESCA, JR.

My name is Charles A. Maresca, Jr. I am the staff attorney for the National Interreligious Service Board for Conscientious Objectors. I am a member of the Maryland bar, and I have been on the NISBCO staff since 1979.

The National Interreligious Service Board for Conscientious Objectors is an association of over thirty denominations and national religious groups which was formed fifty years ago and which exists to defend and extend the rights of conscientious objectors to military service.

For the past four years, NISBCO has been offering testimony about the standard that the Selective Service System plans to use in judging conscientious objector claims in the event of a return to national conscription. NISBCO deeply appreciates the concern which this committee has already demonstrated for the problem this test presents for conscientious objectors.

Selective Service plans to require that every conscientious objector must demonstrate to the satisfaction of the local board that he or she would suffer "no rest or peace" in the event that the CO classification were denied. Such a standard goes beyond what the statute and controlling Supreme Court decisions require. It constitutes a psychological test, rather than a belief and sincerity test, which is what should be required. This "no rest or peace" standard, which we have also called a "mental anguish" test, using that phrase because it appears in the Selective Service training manual for local board members, is illegal, confusing, and has the potential to disrupt the processing of every conscientious objector claim, until it is resolved.

HISTORY

Madam Chair, the language used to create this illegal standard originates in 1970, with the landmark case of *Welsh* v. *United States*. 398 U.S. 333 (1970). In a plurality opinion summarizing the predicament of Welsh and other conscientious objectors similarly situated, Justice Hugo Black wrote

> On the basis of these [nonreligious] beliefs and the conclusion of the Court of Appeals that he held them "with the strength of more traditional religious convictions," we think Welsh was clearly entitled to a conscientious objector exemption. Section 6(j) requires no more. That section exempts from military service all those whose consciences, spurred by deeply held moral, ethical, or religious beliefs, would give them no rest or peace if they allowed themselves to become a part of an instrument of war.
> *Welsh* v. *United States* 398 U.S. 333, 343-344 (1970) (citation omitted).

Anticipating large numbers of "nonreligious" conscientious objector claimants and seeing no objective way of determining the quality of their beliefs, Selective Service in 1972 revised its CO regulations and form (which itself has the legal force and effect of regulations) to include the requirement that the CO applicant demonstrate that he or she would suffer "no rest or peace" should the CO claim be denied. Both the regulations and the form have since contained the illegal "no rest or peace" mental anguish standard.

THE DIRECTORS REPORT TO THE CONGRESS IS WRONG

In Senate Report 101-128, this Committee expressed concern that Selective Service was planning to use this "no rest or peace" standard to judge conscientious objector claims, and required the agency "to provide a report showing that its definition conforms to federal case law." (Page 139.) In his letter of response dated March 13, 1990, the Director of Selective Service admits that "mental anguish" is one of several considerations which local board members are trained to use to judge conscientious objector claims. The training manual tells the board member that the conscientious objector "must identify and describe the mental anguish that would result from participating in war." When this module lecture is summarized, the trainer is instructed to repeat, "What mental anguish would result from participating in war?" Module Summary Lecture, "A Night with the Board," Module No. 10, page 1. This interrogation about mental anguish implements the "no rest nor peace" regulation.

WHY THIS STANDARD IS WRONG

The use of this standard is wrong as a matter of law. The Supreme Court has consistently stated that the conscientious objector has to present a prima facie claim: the applicant must show (1) opposition to participation in war in any form, (2) this opposition is based upon religious training and belief within the meaning of that term in Section 6(j) of the Military Selective Service Act, and (3) he or she is sincere in this belief. It is then up to the local board to find "some basis in fact" for finding that the claimant is not opposed to war in any form, or that the claim is not based on religious, moral, or ethical beliefs, or that the claimant is insincere. This is the standard which the United States Supreme Court used to decide *Clay* v. *United States* 403 U.S. 698 (1971). We note that the Director agreed in his letter to Senator Byrd that the *Clay* decision is a "useful brief summary of applicable law * * *." Though it was decided after Welsh, *Clay* makes no mention of a "no rest nor peace" standard.

Madam Chair, as we told this committee last year, in our research we could find only two cases in which this "no rest or peace" standard was placed in issue; in both cases, the courts ruled that the use of this standard was invalid. *Chapin* v. *Webb*, 701 F. Supp. 970 (D.Conn. 1988); *Masser* v. *Connolly*, 514 F. Supp. 734 (E.D.Pa. 1981). In a third case, *O'Hara* v. *Laird* 339 F. Supp. 101 (D.R.I. 1972), the court in a footnote quoted the Conscientious Objector Review Board to the effect that the service member applying for a CO discharge had not established that his conscience would give him "no rest or peace if he allowed himself to remain an instrument of war." The court found that the denial of this CO application was without basis in fact. "(T)he Board is not at liberty to merely disbelieve the claimant. There must be some facts in his application—hard, provable, reliable facts—that provide a basis for disbelieving the claimant. *O Hara*, quoting *Helwick* v. *Laird* 438 F.2d 959 (5th Cir. 1971), at 963.

Not only is this standard illegal and speculative; it is also confusing to the registrant applying for classification as a conscientious objector. All such applicants must demonstrate the sincerity of belief; the more unshakable the belief, the better. On the other hand, under this "no rest or peace" standard, applicants would at the same time have to demonstrate that those beliefs would somehow not sustain them fully were they to be drafted.

We are convinced that local board members in many cases will misunderstand the standard, and still others will use it as a pretext to deny claims, as is already the case with in-service military claims. We also believe that some COs, scrupulous as they are, may mistakenly believe that they do not qualify because of this "mental anguish" requirement.

NISBCO would furthermore like this committee to understand that the potential conflict over this standard would jeopardize the processing of CO claims nationwide, during a time of national mobilization. We fear that court injunctions against illegal CO processing would interfere with such a mobilization and the outcome would be to curtail the rights of COs.

WHERE THE STANDARD APPEARS

The Director also incorrectly states that his agency's regulations do not require the use of the "no rest or peace" standard. He has apparently overlooked again 32 C.F.R. 1636.8(b). This regulation has survived the revisions of Selective Service regulations which took place in the 1980s. 32 C.F.R. 1636.8(b) states: "The registrant's stated convictions should be a matter of conscience which would give him no rest or peace should he participate in war." (Emphasis added.) This test also appears on the CO Form. We have reproduced that form as an appendix to our testimony. All this information we have previously supplied the Director.

WE ARE CONCERNED ABOUT THE DIRECTOR'S REMARKS

Madam Chair, in his remarks before this committee, the Director of Selective Service said that my organization is responsible for "misinformation and distortion" on this issue. We most strenuously disagree with this characterization of our efforts. NISBCO is an association of churches and religious organizations, whose representatives are men and women of high principle. We do not, as a matter of belief and practice, engage in the telling of untruths or half-truths. Since we have made great efforts to be open and clear about this standard with this committee and in our meetings with the Director, his allegations are of concern to us.

PROPOSED ACTIONS

Given Selective Service's inaction on this issue of great importance to the rights of conscientious objectors, we urge this committee to direct that this regulation be revoked. At the least, funds for Selective Service should be withheld until this regulation is revoked, and every member of every local board notified of the revocation.

We further suggest that with the sweeping changes in Europe and the collapse of the Warsaw Pact, Madam Chair, there is nothing left of the Selective Service mission. An unforeseen attack in Europe by the Soviet Union is no longer likely, or perhaps even possible. Registration for conscription to provide combat replacements in a war in Central Europe is no longer justifiable. With imminent world-wide force reductions, the foreseeable need for conscription, which is the only mission of Selective Service, is over and gone.

Further, on the basis of the Selective Service testimony, and the Director's inadequate and incorrect response to specific Congressional instructions on this issue, you must ask whether Selective Service currently has the capability to review its regulations for legal sufficiency. It appears to us they do not. This is a minimal requirement for any executive agency, but it is a critical requirement for the agency charged with directing this nation's system of conscription in a time of national emergency. NISBCO believes that this is strong evidence that the Selective Service System is currently incapable of carrying out what remains of its mission, and we suggest that at least the draft registration program be defunded.

In his testimony and in his annual report, the Director refers to the large amounts of money that the SSS public information program requires, principally responding to requests for information generated by the Solomon amendments' restrictions on federal and state financial aid, federal employment, and similar state programs. Defunding would also save this hidden cost of draft registration.

Defunding registration would also relieve those conscientious objectors who are suffering now as a result of the Solomon laws. Some conscientious objectors of sensitive spirit are convinced it is wrong to register for war, and as a consequence are denied federal and state assistance for higher education or job training. These persons of high dedication could reenter the normal process of preparing for service to others and to the society.

STATEMENT OF ALVIN V. BLOCK, PRESIDENT, ESA, INC.

COMPUTER-DRIVEN ANALYZER

Senator GARN. Mr. Block?

Mr. BLOCK. Thank you.

My company has developed a sophisticated computer-driven analyzer capable of measuring and resolving several hundred compounds at the part-per-trillion level in virtually any kind of a liquid sample. This instrumentation can be used for studies on neurodegenerative disorders, the detection of cancer, for behavioral studies, nutritional studies, and the measurement of pesticides and toxic substances.

Presently, the Congress is wrestling with the problems of a health care burden in the United States that exceeds $400 billion each year. Approximately 20 percent of that burden comes from degenerative disorders. Four million people presently have Alzheimer's disease, at an estimated annual cost of $80 billion. This is a drastic increase over estimates of 5 years ago, and this cost can be expected to grow as the population ages.

I offer these examples of hope. A scientific paper which reports on the possible mechanism of action for Huntington's disease. This paper suggests a possible course of treatment through modification of diet.

A report on the ability to select Alzheimer's, Parkinson's, and Huntington samples from normal controls among 1,500 postmortem human samples, a harbinger certainly that a diagnostic test may be possible. This work was possible only because of the availability of our neurochemical analyzer.

Mr. Chairman, I respectfully urge this subcommittee to initiate the following programs: At the VA, to develop a diagnostic data base for degenerative disorders, including Alzheimer's, Huntington's, and Parkinson's, utilizing the electrochemical array system technology. At the EPA, to evaluate this technology and to support its application to monitor the environment and reduce pollution. This could include measuring benzidenes and phenols which can find their way into the water table.

At the Institute of Medicine and the NSF, to evaluate this technology and, after examining the body of knowledge which exists in neurochemical research, to make recommendations to the various governmental agencies on how this technology can be applied to their specific mandate and purview.

Last, at NASA, to support the application of this technology to studies of osteoporosis and the neuropsychological effects of extended weightlessness and to continue the research started on space motion sickness utilizing this technology.

Thank you.

[The statement follows:]

STATEMENT OF ALVIN V. BLOCK

My name is Alvin V. Block. I am President of ESA, Incorporated in Bedford, Massachusetts. For 15 years, I have appeared before this committee and others to testify on health issues.

Today, I bring you a success story. With the help and faith of the Congress and other government officials, plus a lot of hard work on the part of scientists and engineers at ESA and their research partners at some of America's leading universities and hospitals, new progress in addressing some of the most pernicious neurodegenerative diseases is beginning to unfold.

I speak of Alzheimer's, Huntington's and Parkinson's diseases.

In getting to this point, we have also found that our small, 20 year old company may have significant impact on the possible solutions to a number of other wide-ranging problems. I speak of pollution, food quality and purity, even the problem of astronauts getting sick in space.

I offer for the record some details of the application of our proprietary technology to some of these problems. I will also acquaint you with some sobering news about its application in advanced research in foreign countries and talk briefly of how in my opinion, we need to provide additional support for academic researchers who wish to push the technology to the limit in tackling brain disorders such as Alzheimer's.

During the past ten years, we have focused much of our attention on development of very sophisticated, multi-sensor electrochemical detectors. The most advanced of these is the 16-channel NEUROCHEM^R analyzer, a completely automated computer-driven instrument that is performing the biomedical research that I mentioned in the beginning of my talk. The analyzer is capable of measuring and resolving several hundred compounds at the part per trillion level in virtually any kind of liquid sample. Less complex instruments in our electrochemical array family are being used in more routine applications.

Applications of this technology, besides those I have mentioned, include the detection of cancer, behavioral studies, nutritional studies and measurement of pesticides and toxic substances. Other studies focus on cardiovascular disease, alcoholism, pain, fertility and drug abuse. Outside of the health areas, this technology can be of great assistance to private industry and government organizations, such as the Food and Drug Administration. The capabilities of this instrumentation can permit the much improved measurement of small quantitites of food components, such as natural constituents, adulteration products, or toxic components of insecticides or pesticides.

In Japan, all newborn children are required to be tested for neuroblastoma, a highly malignant tumor that usually occurs in children under the age of 4. It is found mainly in the adrenals or sympathetic nervous system or in the brain. Our COULOCHEM^R analyzers are the sole instruments used in this testing. Approximately one and one-half million infants are tested in Japan each year with our instruments. More than 4 million have been tested all together. The Japanese government, in conjunction with their medical profession, has determined that it is cost effective and medically helpful to screen newborns for this disorder and to take corrective action. There is no equivalent mandated program for neuroblastoma in the United States at this time.

Interest in our electrochemical array system technology in Japan is not limited to clinical applications. The Japanese are the leading purchasers of our most advanced system, the NEUROCHEM^R. Japanese purchases exceed those made in the United States. A number of the NEUROCHEM^R instruments have also been purchased in Europe. It seems clear to me that in Japan and Europe, interest in playing a major role in neuroscience research is widespread.

American researchers have flocked to us asking us to run samples for them to test the application of the technology to their research. But many of them report to us later that they cannot purchase the equipment because the inclusion of expensive equipment or instruments on NIH grant applications jeopardizes their approval. Even in industry, the current planning horizons have made it difficult to implement projects to assure food purity. The electrochemical array system technology is expensive to purchase. The most sophisticated instruments sell for more than $100,000. But it is a fair price considering its development cost and its value to a user.

More important, it is a price that non-U.S. researchers are very willing to pay.

At the present time, the Congress is wrestling with the problems of a health care burden in the United States that exceeds $400 billion each year. Already, approximately 20 percent of that burden comes from degenerative disorders. Recent testimony by Dr. Williams, Director of the National Institute on Aging, National Institutes of Health, estimates that 4 million people have Alzheimer's disease at an estimated annual cost of $80 billion. This is a drastic increase over estimates of 5 years ago. And this cost can be expected to grow as the population ages.

I offer three examples of hope:

- One, a paper accepted for publication in the Journal of Neurochemistry reports on a possible mechanism of action for Huntington's disease. This paper suggests a possible course of treatment through modification of diet.
- A second development is a report at the 2nd Annual International Alzheimer's and Parkinson's Conference last fall in Kyoto, Japan, of the ability to select out Alzheimer's, Parkinson's and Huntington's samples from normal controls among 1,500 post mortem human samples - a harbinger, certainly, that a diagnostic test may be possible.
- Finally, a pathfinding paper published in the Proceedings of the National Academy of Sciences in November describes how rats afflicted with a Parkinson's-like disease were successfully treated. The scientists, at the University of California and elsewhere, used gene therapy. They transplanted a healthy gene that produces L-dopa to supplant the rats' failed gene, which couldn't produce that essential amino acid.

All of this work was possible only because of the availability of our NEUROCHEM^R analyzer. I must point out, that in each of these cases, we loaned the equipment to the researcher because funds were not immediately available for purchase.

Mr. Chairman, I respectfully urge this subcommittee to initiate the following programs:

1. At the Veteran's Administration, to develop a diagnostic data base for degenerative disorders - including Alzheimer's, Huntington's and Parkinson's - utilizing the electrochemical array system technology.
2. At the Environmental Protection Agency, to evaluate our technology and to support its application to monitor the environment and the reduction of pollution. This would include measuring benzidenes and phenols which can find their way into the water table.
3. At the Institute of Medicine and the National Science Foundation, to evaluate our technology and after examining the body of knowledge which exists in neurochemical research to make recommendations to the various governmental agencies on how this technology can be applied to their specific mandate or purviews.
4. At the National Aeronautics and Space Administration, to support the application of this technology to studies of osteoporosis and the neuropsychological effects of extended weightlessness and to continue the research started on space motion sickness utilizing this technology to solve the problem for astronauts.

The Alzheimer's program would complement and build upon the research already underway by key research groups across the country. The program would be focused at several of the Alzheimer's disease centers where work is already being done. It is likely that since ESA has developed this instrumentation, it will be utilized in this program. But even more important is that the program be initiated with the goal of developing a series of diagnostic tests for these disorders.

If the mechanism of a disorder can be determined and understood, it may be possible to develop a method for diagnosis, control and treatment, perhaps by pharmaceuticals or diet.

I may be criticized, Mr. Chairman, for urging such a program because my company, ESA, as developer of the instruments that would be used in the performance of this program, would obviously benefit. But Mr. Chairman, this is trivial when measured against the benefits that might accrue to those who are afflicted with these degenerative disorders and who are suffering without hope of relief.

When considered against the backdrop of 4 million afflicted and an 80 billion dollar cost each year for Alzheimer's alone, the few million dollars needed for this program are insignificant - the benefits are not.

There can be no guarantees, but I believe, Mr. Chairman, that based on research that has already been performed, there is a high probability that we can develop inexpensive diagnostic tests that can be utilized routinely if this program is properly coordinated and funded.

Thank you, Mr. Chairman.

SPACE ADAPTATION SYNDROME

Senator GARN. Thank you very much to all of you. I do know something about space adaptation syndrome from a personal standpoint. I doubt if anybody else has flown up in space from this audience, but NASA has to put that fancy term on it—space adaptation syndrome. Makes it sound better, I suppose.

Thank you very much. We appreciate your testimony.

The last panel to testify today on CPSC's budget request includes: Mary Ellen Fise, Consumer Federation of America; John Walsh, the Danny Foundation; Kristen Rand for Consumers Union; William Kamela; Lucinda Sikes with U.S. Public Interest Research Group; and Pamela Gilbert of Public Citizen's Congress Watch.

I'm happy to welcome all of you here today to testify and we'll start with Ms. Fise.

CONSUMER PRODUCT SAFETY COMMISSION

STATEMENT OF MARY ELLEN R. FISE, PRODUCT SAFETY DIRECTOR, CONSUMER FEDERATION OF AMERICA

Ms. FISE. Good afternoon, Senator Garn.

I'm product safety director for Consumer Federation of America and I'm pleased to testify on the 1991 appropriation for CPSC. My testimony today also represents the view of the Coalition for Consumer Health and Safety.

REINVIGORATE CPSC

Today, CFA and Consumers Union have released this report. It's entitled, "Pennies for Consumer Protection: A Report on the CPSC Budget." In that report, we have recommended and we recommend that this subcommittee reinvigorate CPSC and restore its ability to protect American consumers by appropriating $50 million in 1991.

CPSC is a tiny Federal agency but it's faced with a staggering objective in light of its limited budget. Every year 22,500 consumers die and 3.4 million consumers suffer severe disabling injury. Yet the Bush administration has requested only $35.6 million and 513 FTE's. This represents the lowest personnel level ever in the history of the agency and is $1.7 million below the current services requirement.

Last year CPSC sent OMB an additional request of $40.3 million. This request was described as representing a minimum cost to conduct a viable product safety effort. However, as I previously noted, OMB has reduced the agency's budget by $5 million.

We believe the current budget is inadequate because it lacks hazard contract funds; it does not address safety issues. For example, fire is the second leading cause of accidental death in the home and CPSC plans only two fire hazard projects.

In 1991, funds allocated for compliance and enforcement actions will decrease. And that's despite the fact that it's been years since the compliance with certain CPSC regulations have been assessed. It's despite the fact that manufacturer reports to CPSC about hazardous products are on the decline.

DATA COLLECTION CRITICAL

Collecting data about product hazards, including how, when, where and why consumer deaths and injuries occur is a critical function. Yet this has also been underfunded, as has disseminating the information to consumers about product hazards.

We believe that the CPSC staff will be further hamstrung by the fact that there are no funds for equipment purchases in this budget. We believe that Congress must direct CPSC to step up its consumer safety efforts and we urge the subcommittee to appropriate $50 million for fiscal year 1991.

Thank you.

Senator **Garn**. Thank you. Again, the full testimony of all of you will be placed in the record. I apologize, when we are getting so close to finishing, of asking you to wait. But unfortunately, that one light means that there is a vote going on.

[The statement follows:]

Statement of Mary Ellen R. Fise

Madam Chairman, I am Mary Ellen Fise, Product Safety Director of Consumer Federation of America (CFA)[1]. I am pleased to testify today on the fiscal year 1991 Appropriation for the U.S. Consumer Product Safety Commission (CPSC). My testimony today also represents the views of the Coalition for Consumer Health and Safety [2].

CFA urges this Subcommittee to reinvigorate CPSC and restore its ability to protect American consumers by appropriating $50 million for CPSC in fiscal year 1991. Although a tiny federal agency, in comparison to other health and safety agencies, the CPSC is fortunate to have extremely dedicated employees struggling to reduce consumer deaths and injuries—a staggering objective in light of the limited funds at their disposal. Each year an estimated 22,500 consumers die in household accidents and an additional 3.4 million suffer disabling injuries; stated another way: every nine seconds a Consumer is injured in a home accident and every 23 minutes a consumer dies as a result of such an accident.

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[1] CFA is a non-profit consumer advocacy organization representing more than 250 local, state and national consumer groups with a combined membership of more than 50 million Americans.

[2] Members of The Coalition for Consumer Health and Safety include 17 consumer and health groups and 22 insurance companies and associations. In its Consumer Health and Safety Agenda, the Coalition endorses an increase in CPSC's budget to $50 million.

Yet the Bush Administration has requested only $35.6 million and 513 full-time equivalents (FTEs) for CPSC in 1991—a budget authority $7 million dollars less than its budget in 1981 and the lowest personnel level ever in the history of the agency. Moreover, this budget request is $1.7 million below the agency's current services requirement. According to CPSC, considering inflation, pay raise absorptions and reduced appropriations, resources available to the agency have steadily declined by $10 million in the last six years.

Last year in preparing its fiscal year 1991 budget submission for OMB, the CPSC staff prepared a budget request of $40.3 million and 550 FTEs. This request was described as representing the minimum cost to conduct a viable product safety effort. However, OMB reduced the agency's request by nearly $5 million. Apparently the notion of a "kinder and gentler nation" does not encompass reducing preventable consumer deaths and injuries. CFA believes the CPSC budget request is inadequate for the following reasons.

NO HAZARD CONTRACT FUNDS

The lack of hazard contract funds is, in our estimation, the most egregious result of OMB's hacksaw. According to CPSC staff the lack of hazard contract funds "significantly detracts from the Commission's capacity to address hazardous products in a timely authoritative manner." Without the ability to seek outside assistance from those with needed expertise, projects are delayed a year or more or terminated entirely. CPSC must be given hazard contract funds each year in order to assure that hazard reduction programs proceed in a timely fashion.

ISSUES NOT ADDRESSED

A lack of money translates directly into a reduction in the number of product hazards that CPSC can address. For example, an examination of the Commission's 1991 projects addressing fire hazards highlights the extremely deleterious effects of OMB's penurious budget reductions. According to CPSC: "Fire is the second leading cause of accidental death in the home, and is the leading cause of accidental home deaths among children less than five years old. An estimated 4,660 fatalities were related to home fires in 1987, approximately eighty percent of all fire deaths in the United States." Despite these statistics, CPSC plans only two fire hazard projects for fiscal year 1991: cigarette lighters and heat tapes. Nightwear flammability has been virtually eliminated by the Commission's recent vote not to pursue the project. To meet OMB's prescribed budget level, CPSC deleted projects addressing fire and burn hazards associated with upholstered furniture, fireworks, kerosene heaters, and kitchen ranges.

DELAYS BECAUSE OF BUDGET RESTRAINTS

With successive budgets providing limited resources, CPSC increasingly falls behind in its programs to reduce product hazards. Projects underway have been delayed and new projects have not been initiated. Despite a CFA petition filed in July 1989, there is no project in the 1990 or 1991 budgets to address the suffocation risk to infants who are placed on waterbeds. If the Commission votes to grant this petition resources will have to be taken from other projects. Another CFA petition filed in November 1988 on hazardous crib toys, that have strangled and killed at least 30 infants, will finally be addressed (if the Commission votes to grant the petition) in fiscal year 1991. According to CPSC, projects on fires caused by electric fans, and bicycle-related deaths and injuries have been delayed and eventually dropped due to declining resources. Many other projects, such as appliance fires, and lawn mower accidents have been delayed for a year or longer, again resulting in unnecessary deaths, injuries, and millions of dollars in casualty losses.

EFFECTS ON COMPLIANCE AND ENFORCEMENT

The 1991 CPSC budget contains reductions in both personnel (FTEs) and funds allocated for compliance and enforcement actions by CPSC. These decreases occur despite the agency's admission that "it has been years since nationwide compliance with certain CPSC regulations has been assessed" and that reporting of hazardous products under Section 15 is on the decline.

The 1991 budget fails to provide the necessary funds to evaluate compliance with voluntary standards formally or informally deferred to by the agency. CPSC has deferred to voluntary standards in at least 16 cases. Yet, the 1991 budget allows CPSC to monitor only one standard. The staff had recommended monitoring six. Because these standards are deferred to in lieu of mandatory requirements, it is critical that CPSC monitor compliance to assure that consumers receive the promised protection afforded by the voluntary standards.

HAZARD IDENTIFICATION AND ANALYSIS

Collecting data about product hazards, including how, when, where and why consumer deaths and injuries occur, is a critical function of CPSC. Central to the CPSC data collection efforts is the National Electronic Injury Surveillance System (NEISS). Despite a finding in 1978 that this system should consist of 130 hospitals, budget reductions over the past several years have caused the NEISS hospital sample size to fall to 65 (in 1990). The fiscal year 1991 budget expansion to 92 hospitals leaves the agency still 38 hospitals shy of the recommended level for predicting national estimates of consumer injury. Several other very worthwhile data collection projects were not funded in the 1991 budget.

INFORMATION AND EDUCATION

Disseminating information to the public about consumer product hazards is another important CPSC mission. The agency's methods of alerting the public to recalled products are extremely inadequate. In addition, the extensive work on hazard analysis and reduction often is wasted because of insufficient consumer information funds. For example, the agency will be unable to print (in adequate quantities) and distribute a handbook making specific recommendations for decreasing the estimated 200,000 playground injuries each year. The knowledge and steps to prevent accidents will instead sit on government shelves instead of receiving widespread distribution and adoption.

EQUIPMENT AND SUPPLIES

Without proper equipment and supplies to perform their duties, CPSC staff become further hamstrung in their attempts to protect the American public. The CPSC 1991 budget contains no funds for any CPSC equipment purchase and no funds are allocated for further implementation of the agency's office automation system. The complete lack of equipment or the use of broken or faulty hand-me-down equipment should not be the Commission's excuse for delayed consumer testing to assure safer consumer products.

In summary, CFA believes that Congress must step in and indicate its support for the government's role in product safety. It is critical that you let OMB know that you want CPSC to be a strong protector of consumers and not the deceptive shell of a consumer agency it has become. With a budget of $50 million CPSC will have the resources to shore up its data collection efforts, broaden its enforcement review, begin and continue important hazard reduction programs and disseminate needed safety information. The additional $14.4 million (above the OMB request) works out to approximately six cents per consumer, hardly an onerous burden. And yet the potential savings in terms of reduced deaths, injuries and property damage that could result from such a small investment in CPSC would be enormous. CFA urges that the Subcommittee exercise its support for injury reduction and control and its commitment to reinvigorating CPSC by allocating $50 million for fiscal year 1991.

Senator GARN. So if you will excuse me, I will play O.J. Simpson and I will, as rapidly as I can, go and vote, and I will return.

So the subcommittee will stand in recess for about 10 minutes.

[A brief recess was taken.]

Senator GARN. The subcommittee will come to order.

I appreciate your patience in being willing to wait.

Mr. Walsh?

STATEMENT OF JOHN J. WALSH, EXECUTIVE DIRECTOR, THE DANNY FOUNDATION

CRIB SAFETY

Mr. WALSH. Thank you, Senator.

I represent the Danny Foundation, a little and successful organization, dedicated to crib safety. My testimony today is going to be very specific on one aspect of crib safety and that is the crib finial, or corner post extension.

Now, this problem has been around for a while but it's not going away. I'm addressing my remarks to secondhand cribs. There are up to 10 million in this country. They're not like used cars; they don't go out of circulation; they get passed down from one generation to another, from one neighbor to another.

Most of those cribs are unsafe. The aspect that corner post extensions—data collection has been around since 1973—continues to kill three children every year. How? They try to climb out of the crib; they simply catch, innocently enough, their shirt, and hang themselves. That's what happened to Danny Lineweaver after whom this foundation is named.

You might say, well, that's not a whole lot of people. But there are three people that are dying every year, needlessly. It's ridiculous. We want to put this problem to rest. If it were faced 10 years ago, as it should have been, it would have been.

EDUCATION PROGRAM CALLED FOR

So we're calling for an education campaign on the part of CPSC—every pediatrician's office, every obstetrician's office, every birthing center throughout the country should have the warning about corner post extensions or finials, especially on the secondhand market. Don't buy them; it's a danger.

This problem can be put to rest. I don't want to come back here next year—and risk losing my luggage, as I did, in the friendly skies—and paying all kind of money, but we will do that. Because, picture yourself going into a nursery and finding your child hanging, innocently, dead. It doesn't need to happen. We're just encouraging CPSC to take this under advisement right now, follow up on our petition that we offered in 1989, recall these dangerous cribs and get an educational program out there to warn parents so they won't put their child in this type of crib.

It's ridiculous; it's a focus problem. Of all the problems that you're going to be faced with, I would venture to say that this is the most solvable. I don't want to have to address this next year, and neither do you, and neither does CPSC.

Thank you, Senator.

CRIB RECALL

Senator GARN. Let me just ask you one question. I certainly don't want to be misunderstood. I have seven children and my seventh grandchild will be here in June and my eighth grandchild in November. But I didn't quite understand your comment about a recall.

I'll admit we're typical. With that many children, cribs get passed down. We're just giving one of our old cribs to our son, whose wife is having her first baby next month. So I just wanted to clarify how—when you said recall of the used ones, how do you implement that with old grandfathers like me who pass them down?

Mr. **Walsh**. Me too. I'm going to give you this brochure, for one thing, for your family: "Is Your Crib Safe?" It simply is going to be in conjunction with CPSC's Compliance Division. Really we're talking about a recall of cribs made from, say, 1980 to 1986, of known cribs.

But it's really going to take the educational program too. Because once parents know of this, they won't take that chance. This is one area that education works in prevention of injury; our data indicates that. But it isn't going away; it's ridiculous. Despite the fact that there are new rules making voluntary standards against corner post extensions for new cribs, the data continues to say—as a matter of fact, in 1988 there were four deaths and serious injury for this.

So our argument isn't based on numbers; it's just based on let's do away with this, once and for all.

Senator **Garn**. No; I understand. I wanted to clarify what you were saying. Our oldest crib in our family is the age of my oldest son that is 32. My youngest daughter is 7. I've been raising children continuously for 30 years. I have never been away from them. Because my last daughter is 7; my oldest grandson is 5. So when I say, literally, I have been raising children and babies for 32 years without a break—it's a little bit embarrassing when I go to back to school night and the teachers come up and say, "Oh, we don't very often have grandfathers come with their grandchildren." I say, "That is my daughter."

Mr. **Walsh**. I know what you're saying, Senator.

Senator **Garn**. Thank you for the clarification.

Mr. **Walsh**. You're welcome.

[The statement follows:]

STATEMENT OF JOHN J. WALSH

On behalf of The Danny Foundation, I am pleased and honored to pffer testimony before this Senate Subcomittee.

Danny Lineweaver, was born August 1, 1982, and he was a healthy, active child. Just before his second birthday, Rose Lineweaver, Danny's mother, placed Danny in his crib for his daily nap. She left him in his crib, went to her room, and turned on the intercom monitor. A few minutes later, when Rose checked on him, Danny was hanging by his neck outside the crib from the crib's corner post extension.

Danny apparently had attempted to climb out of his crib, caught the shoulder strap of his shirt on one of the 2" decorative corner post extensions, and was strangled. Danny was revived but is still in a semi-comatose condition, with permanent, severe brain damage, even though he continues to grow normally, and is physically healthy. He receives 24-hour live-in care, which will be required for the rest of his life, estimated by medical specialists to be as much as 45 years.

After the Lineweavers investigated this bizarre tragedy, they were shocked and angered to find that since 1973, when the CPSC began keeping records over 30 other infants had died as a result of becoming entangled and hanged, just like Danny, on their crib corner post extensions, called finials. The crib manufacturers and the United States Consumer Product Safety Commission had known about the dangers posed by these finials since at least 1978. Nevertheless, finials were still being featured on cribs manufactured in the U.S. in 1984 when the Lineweavers bought Danny's crib new at a leading department store.

It took nearly a year after Danny's accident before the first CPSC safety alert was issued. To this date, the manufacturers still have not taken any steps to recall any of the cribs with finials which they know to be dangerous. The CPSC's own estimates indicate that there may be as many as 12 million cribs still in use or in storage that feature dangerously extended corner post finials. Since a well manufactured wooden crib has a 20 year useful life it is absolutely irrefutable that many more infants will die this way because of cribs manufactured before 1985.

The Lineweavers filed a lawsuit against the manufacturer and retailer of Danny's crib, and it was settled, providing an annuity for Danny's care and, at the insistence of his family, also providing seed money to form an organization to address the problems of used cribs and crib manufacturing, which is called The Danny Foundation.

In August of 1989, The Danny Foundation petitioned the CPSC for a mandatory rule-making against corner post extensions of any size. The second part of the petition called for a recall of cribs with corner post extensions, and an educational campaign to alert the public regarding this danger. We have been informed by the CPSC that the petition for rule-making was placed on a docket and that our request for a recall and educational campaign was referred to the compliance section of the CPSC. We have received further word that a final decision on the mandatory rule against corner post extensions will be reached in September of 1990. As of this date, we have not heard definite word regarding a recall and educational campaign regarding used cribs with dangerous corner post extensions.

The Danny Foundation's contention is that we have a serious life threatening problem here that is solvable. There is no question that children continue to die every year from dangerous cribs with corner post extensions. As a matter of fact, the attached data will indicate an increase in the number of deaths from corner post entanglement in 1988. A recent survey conducted in Martinez, California, by The Danny Foundation indicates that when people know of corner post extensions, they will not use such a crib. A thorough educational campaign on the part of the CPSC and the crib industry will be effective. Warnings should be sent to every pediatrician/obstetrician, lamaze instructor, birthing center, hospital, as well as to all thrift stores, i.e.

Salvation Army, St. Vincent De Paul, etc. A direct mail program to every household in this country is also necessary to produce the desired results. Public Service Announcements distributed through TV, radio, and newspapers will reach millions more.

Right now, the CPSC is in no position to implement this project. CPSC is understaffed and underfunded. Serious petitions to the Commission often are denied in favor of a voluntary standard process that simply takes too long and costs too many lives.

The existence of the CPSC implies to consumers that their government is looking out for them. But statistics of injuries and deaths belie that implication. Over 50 children are killed every year in crib related accidents, and over 1,000 children per month are injured in crib accidents, seriously enough to require hospital treatment.

We are requesting that this appropriations subcommittee recommend a CPSC budget line item to provide for a massive crib educational campaign, and a recall of dangerous cribs with corner post extensions.

In conclusion, Danny and the entire Lineweaver Family, and The Danny Foundation urge that the CPSC be given the necessary funds to fulfill its mandate to protect the consumers of our country, by truly regulating products - and especially children's products - that are manufactured, distributed or imported in this country. We further urge, that a budget line item be provided for the necessary crib safety education and recall that is demanded by the continued deaths to children throughout this country.

STATEMENT OF M. KRISTEN RAND, COUNSEL, WASHINGTON OFFICE OF CONSUMERS UNION

Senator **Garn**. Ms. Rand?

Ms. **Rand**. Thank you, Senator.

I am Kristen Rand, counsel for Consumers Union. We're the publisher of Consumer Reports magazine.

I just want to address one specific area of how CPSC is an extremely important cost-saver. In this era of tight budget constraints, it becomes the role of the Federal Government to set priorities. Consumers Union believes that the prevention of product-related death and injury should be a top priority.

The 22,000 product-related deaths and 3.4 million injuries that occur each year inflict tremendous cost on society, not only terrible pain and suffering but substantial monetary cost as well. A $50 million budget for CPSC will result in savings of billions of dollars in lost productivity and health care costs and will prevent untold physical and emotional pain.

BICYCLE-RELATED INJURIES

CPSC may well be the most cost-effective dollar that this subcommittee can spend. I'd just like to offer one example that illustrates the enormous cost of injury associated with just one product that CPSC oversees, and that's bicycle-related injuries, specifically, severe head injuries caused by bicycle accidents.

Each year, 50,000 people suffer serious head injuries from bicycle accidents. The estimate for the total lifetime cost of an individual suffering a head injury is over $4.5 million. A recent study of the cost of injury in the United States found that public funds cover 28 percent of the cost of injury. This means that the 50,000 annual bicycle-related severe head injuries each year result in expenditure of $63 billion of public funds every year. This expenditure is more than 1,000 times the $50 million CU seeks for CPSC.

CPSC has a dual function in a product like bicycle helmets. The agency is responsible, not only for educating the public regarding how to ride a bicycle safely and the importance of wearing a helmet when they ride a bicycle, but also making sure that bicycles and helmets are safe for the use of the rider, and helmets adequately protect them from injury.

Due to budget constraints CPSC has been forced to delay projects that address this type of bicycle safety. We think it's time that Congress stepped in and appropriated $50 million for CPSC, $14 million over the administration's request. This works out to 6 cents per consumer, and a potential savings in reduced death and injury is in the billions.

We urge the subcommittee to allocate $50 million for CPSC for fiscal 1991.

Thank you.

Senator GARN. Thank you.

[The statement follows:]

STATEMENT OF M. KRISTEN RAND

Mr. Chairman, I am Kristen Rand, Counsel for the Washington Office of Consumers Union (CU). I appreciate the opportunity to testify today on the Fiscal Year 1991 appropriation for the Consumer Product Safety Commission (CPSC). CU is the non-profit publisher of *Consumer Reports*. It engages in consumer advocacy before the executive, judicial, and legislative branches of government.

Consumers Union strongly urges this Subcommittee to revitalize CPSC. CPSC is the smallest of the federal health and safety agencies. Nevertheless, it is charged with an awesome responsibility: ensuring the safety of approximately 15,000 consumer products. It is Consumers Union's experience that Americans expect that the products they buy are safe for their intended use. They assume that the federal government is inspecting products, setting and enforcing meaningful safety standards, and initiating quick and effective recalls when dangerous products are identified. Unfortunately, CPSC, the federal entity responsible for meeting this expectation, is woefully underfunded and understaffed. The minimum appropriation necessary to ensure that CPSC can adequately protect American consumers from unreasonable product hazards is $50 million.

In this era of tight budgetary constraints, it becomes the role of the federal government to set priorities. Consumers Union believes that prevention of product related death and injury should be a top priority. The 22,000 product-related deaths and 3.4 million injuries that occur each year inflict tremendous costs on society--not only terrible pain and suffering, but substantial monetary costs as well. A $50 million budget for CPSC will result in savings of billions of dollars in health care costs and will prevent untold physical and emotional pain. CPSC may well be the cost effective investment this Subcommittee can make.

Costs Associated With Product Injury and Death

Injury is the fourth leading cause of death in the United States. *Cost of Injury in the United States*, a 1989 report to Congress commissioned by NHTSA and the Centers for Disease Control (CDC), found that, "The impact of injury on society is enormous in terms of the economic cost, the public and private burden, and the devastating effect on the lives of injured persons and their families."[1] Yet the study also concluded that "[e]xpenditures for research on injury causation, prevention, and control . . . continue to be dwarfed by research expenditures for other health problems."

CPSC can play a vital role in reducing the exorbitant cost of injury by protecting consumers from unreasonable product hazards.

A Case Study of the Costs of Injury--Severe Head Injury Caused by Bicycle Accidents

One example that illustrates the enormous costs of injury associated with just one product overseen by CPSC is bicycle related death and injury. Approximately 1,000 persons die each year as the result of bicycle accidents. More than 500,000 bicycle-related injuries requiring hospital emergency room treatment occur each year. Of the 500,000 riders injured, 50,000 suffer serious head injury. Estimates of the total lifetime costs for an individual suffering a severe head injury are $4.5 million. *Cost of Injury* found that public funds (including federal, state and local government) cover 28% of medical expenditures for injury. This means that the 50,000 annual bicycle-related severe head injuries alone result in an expenditure of $63 billion of public funds. This expenditure is more than one thousand times the $50 million budget CFA and CU seek for CPSC.

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[1] Former U.S. Surgeon General, C. Everett Koop believes, "If a disease were killing our children in the same proportions that accidents are, people would be outraged and demand that this killer be stopped."

Cost of Injury found that, based on a willingness-to-pay approach that measures how much individuals are willing to pay for a change that reduces the probability of illness or death, individuals are willing to pay $2.6 million to $3.2 million per injury to avoid severe head injuries involving total impairment, or quadriplegia.

The same study found that injury prevention, the very purpose for CPSC's existence, plays a critical role in reducing severe, traumatic injury. The study cites a three year program to increase the use of bicycle helmets in Victoria, Australia. The campaign resulted in a 20 percent reduction in head injury to bicyclists.

CPSC has a dual function in the case of a product like bicycle helmets. The agency is responsible not only for educating the public regarding the importance of always wearing a helmet while bicycling, but also for making sure that helmets will adequately protect riders from injury in the event of an accident. Together these measures can prevent death and serious head trauma to bicyclists. And prevention of needless death and injury results in substantial savings to society.

Costs of Injuries Caused by Fire

Fire is the second leading cause of accidental home deaths among children under five years of age. The elderly are also at high risk for hospitalization due to fire. The average cost for a hospitalized burn patient is $35,303 and the average burn fatality cost is $249,619. However, because of budget constraints CPSC has been forced to delete from its FY 1991 activities projects designed to address the fire hazards presented by upholstered furniture, fireworks, kerosene heaters, cords and plugs and kitchen ranges.

Costs Related to Poisonings

The average cost per person hospitalized for poisoning is $17,631 and the average per person cost of a fatal poisoning is $372,691. As with fires, children and the elderly are particularly vulnerable to poisoning. However, because of lack of resources CPSC has been forced to delay projects designed to improve the available information on poisonings and evaluate the effectiveness of child-resistant packaging and new safety caps.

These are just three example of the tremendous costs generated each year by product hazards. CPSC can do much prevent these needless deaths and injuries, but not without minimum, adequate resources.

In conclusion, Congress must step in to reaffirm the commitment it made to product safety when it created CPSC in 1974. A $50 million budget represents a $14 million increase over the Administration's request. This works out to approximately six cents per consumer. The potential savings from reduced death and injury is in the billions of dollars. Consumers Union believes Americans are more than willing to pay such a small price for safe products. CU urges the Subcommittee to recognize CPSC for the bargain it is and allocate $50 million to the agency for Fiscal Year 1991.

STATEMENT OF WILLIAM C. KAMELA, DIRECTOR OF PUBLIC POLICY, NATIONAL SAFE KIDS CAMPAIGN

Senator **GARN**. Mr. Kamela?

Mr. **KAMELA**. Thank you, Senator.

My name is Bill Kamela, and I'm the director of public policy for the National Safe Kids Campaign. We are the first and only nationwide childhood injury prevention campaign.

Echoing the comments of my fellow panelists, we would also like to advocate $50 million for CPSC and I think we can give you some pretty specific cost-effective reasons as to why.

You, being a father and a grandfather, my being a father of a 2-year-old, we see it every day. It just takes a minute for an accident to happen to a child. Unfortunately, in this country every year, 8,000 children are killed and 50,000 are permanently disabled, most by preventable means, most through technological advances, most through things that we can do day-to-day to make a difference. Yet, because agencies like CPSC are hamstrung, because their budgets are the same as they were, for instance, with CPSC's case, as they were in 1974, with 300 less employees than when they first came on board in 1984, they aren't able to really regulate or monitor the 15,000 products that are currently on the market today.

SCALD BURNS

Just to give you a couple of examples, we just held a press conference at Children's Hospital, which is our parent organization, with Dr. Koop, who is our chairman, the former Surgeon General, to talk about the problem of scald burns. Scald burns in this country—every day 100 children are admitted to emergency rooms because of scald burn injuries, serious enough ofttimes to require skin grafts and plastic surgery. The costs are enormous—$36,000 in the first week.

There is now a device on the market that CPSC will begin looking at, and hopefully will spend some money on next year, that, if embodied in code language around the country, will make a difference in scald burns in the bathtub in every single American home in this country.

The other product is garage door openers. One of your colleagues on the House side, Congressman Sikorski, just introduced a bill on automatic garage door openers. In the last number of years there have been 44 deaths and 15,000 injuries just in the last 10 years. We can retrofit garage door openers for $20, and we can prevent those kinds of injuries. CPSC needs to move on a similar type of project and move into a mode of recalling old garage door openers and making these things happen.

To let you know, we've got 87 coalitions around the country. We're proud to say we're in Utah, at the Utah Safety Council. We hope we can work with all of you, because from a dollars point of view, last year you received a report from CDC that said injury costs you $180 billion. States know the difference; Utah knows the difference. Our Medicaid budgets are swelling. CPSC can make a difference, to make sure that those kinds of death and injuries do not continue to occur.

Thank you.

Senator GARN. Thank you.

[The statement follows:]

STATEMENT OF WILLIAM C. KAMELA

Chairwoman Mikulski and members of the Subcommittee, I am William C. Kamela, the Director of Public Policy for the National SAFE KIDS Campaign, a program created by Children's Hospital here in Washington, D.C. I would like to thank you for the opportunity to come before the Subcommittee to strongly advocate for increased funding for the Consumer Product Safety Commission's (CPSC) budget for Fiscal Year 1991.

SAFE KIDS is the first and only nationwide childhood injury prevention campaign. As you may know, unintentional injuries, better known as accidents to most people, are the leading cause of death among our children, killing some 8,000 annually, while permanently disabling another 50,000.

SAFE KIDS believes an appropriation of $50 million for CPSC in FY 1991 would begin to restore the Agency's effectiveness which was so severely eroded during the 1980's.

I am testifying today on behalf of SAFE KIDS as well as the thousands of volunteers who make up our 87 grassroots coalitions in 37 states, including one in Montgomery County, Maryland (list attached). SAFE KIDS also includes a national coalition, comprised of 90 national organizations committed to reducing the number of childhood injuries.

According to a recent report to the Congress by the Centers for Disease Control injury has a staggering monetary cost to the United States, some $180 billion annually! The lost productivity of our young people is also tragic, particularly in light of projected labor shortages in the very near future. The psychological effects on parents whose children are injured or killed are difficult to calculate, but have led to marital discord in many circumstances.

Many of these childhood injuries and deaths are due to unsafe products and environments which should be regulated, monitored and investigated more rigorously by the CPSC. Consumer-product related injuries claim an estimated 29,000 lives each year in the U.S. In addition, there are an estimated 33 million non-fatal consumer-product injuries annually. Most appalling is that most of this death and suffering could be prevented. SAFE KIDS believes the Congress is in an ideal position to turn this tragedy around by providing CPSC with more resources to carry out its mission.

During the 1970's the CPSC was at the forefront of efforts to protect children from the dangerous products linked to serious injury and death. The Commission was responsible for saving thousands of lives due to its efforts in child resistant packaging of medicines and household poisons, promoting safer design of cribs and baby walkers and banning toys with small parts and sharp edges.

Unfortunately, the 1980's saw the Agency's budget severely reduced, and with it much of CPSC's effectiveness in enforcement, oversight and investigation. The Commission's budget has been reduced from $44 million in FY 1980 to the Bush Administration's request of $35.6 million for FY 1991. Ironically, CPSC's budget in its first year of operation, **FY 1974**, was $35 million. And the Commission's staff -- including highly experienced specialists in a variety of technical areas -- was reduced from 889 FTE's in FY 1981 to the current request of 513 in the FY 1991 budget. Of course these reductions have come at a time when more and more consumer products (currently some 15,000) are flooding the marketplace, both from within and from outside the United States.

I realize that you and your Congressional colleagues are faced with many difficult resource allocation questions. However, as the federal government's eyes and ears for the consumer, CPSC must be funded at a level which will instill confidence and provide some credibility for the agency so that the average American can begin to believe that he/she is being protected from harmful products. Without additional resources the Commission will be forced to continue to be highly selective in the types and scopes of projects it undertakes, leaving painful and often deadly gaps in its protection of the American consumer. Let me give you just three examples to help illustrate my point.

BICYCLE HELMETS

The ability of the Commission to help limit childhood injury goes far beyond toys and toddlers. Each year over 380,000 children are injured in bike-related incidents which require emergency room care (National Electronic Injury Surveillance System, NEISS). CPSC estimates that there continues to be approximately one million injuries and 1,200 deaths associated with bicycles annually. The estimated annual cost of these injuries and deaths is $7.6 billion.

Studies have shown that bicycle helmets are the most effective safeguards against head injuries. Last year SAFE KIDS petitioned the CPSC to issue a mandatory bicycle helmet standard. Action has yet to be taken. Part of the problem undoubtedly lies with the fact that the staff is overwhelmed. Unfortunately, a finger can also be pointed at the Agency's continued reliance on voluntary standards, in the case of bicycle helmets, those issued by ANSI and Snell. ANSI is a self-certifying standard. In a recent test of 34 helmets by Consumer Reports magazine, 4 were found to be unacceptable. All had been ANSI certified by their manufacturers. There are some 60 to 70 helmet models on the market, with projected overall sales increasing from 3 to 4 million in 1990. How many of these helmets are unsafe is an unanswered question that should be explored by CPSC. Also, neither the ANSI nor Snell standards address specific design characteristics, all the more reason to establish a national standard.

The 1991 budget requests only 1 FTE to monitor the conformance of 30 different voluntary standards. There is some money in the Agency's FY 1991 budget for work in the bike helmet area, but more needs to be done, especially in light of new mandatory helmet laws like the one recently instituted in Howard County, Maryland. It should be noted that New York and California have helmet requirements for infants and toddlers, while Pennsylvania, New Jersey and Washington state are considering similar legislation. Parents must be assured that the helmets they buy for their children are indeed safe. CPSC can help provide this assurance.

HOT TAP WATER SCALD BURNS

Burns are the second leading cause of death among children in the United States. Many medical experts agree that a burn is the most devastating and painful injury a human being can sustain and survive. In 1988 alone, 5,000 children were scalded by hot tap water, most often in the bathroom. Overall, there are some 200,000 injuries in the bathroom, with 400 deaths. It is estimated that the cost of initial hospital treatment for a patient with a 50% scald burn is $36,000.

Every year the National SAFE KIDS Campaign targets one type of childhood injury. In 1990 the focus is tap water scald burns. In order to help mitigate the number and severity of scald burns to children, SAFE KIDS developed an amendment to building codes requiring an anti-scald device be installed in bathtub and shower fixtures in new construction. Regional and national code making bodies are currently studying the amendment. Additionally, we are working with numerous housing authorities and developers around the country to retrofit housing units with the safety valve.

CPSC initiated work with code bodies in FY 1988 to incorporate a requirement in the codes for thermal shock or anti-scald devices to protect against hot tap scald in bathtubs and showers. Sadly, the FY 1990 budget request resulted in the elimination of funding for contracts in this area. Specific scald hazards are not addressed in the FY 91 budget either. It will be virtually impossible for the Commission to continue to work towards reducing tap water scald burns through code changes without additional funding for this project. The need is real. Last year 85 children from Maryland were admitted to Children's National Medical Center at a cost of $1,368,500.

GARAGE DOOR OPENERS

Since 1982, at least 44 children under the age of 14 have died in accidents involving automatic garage door openers. Over the last decade more than 15,000 children have been injured by malfunctioning automatic garage door openers. It is estimated that there are over 20 million automatic garage door openers in operation in this country, with approximately 2 million more being sold each year. As many as half of these may not meet the 1982 UL Standard. Injury or death can occur when the automatic opener doesn't have a reverse function or if the reversing function fails to work.

Though CPSC has known about the problem for over ten years, the agency has not had the resources, nor seen fit to do the kind of work necessary to prevent further tragedies. CPSC should:

- mandate a recall for all garage door openers made before 1982 when the UL standard was developed;

- conduct a study to determine whether or not the new standards have been effective in substantially reducing the risk of injury or death;
- enact stricter standards for garage door openers, including the requirement of a fail-safe device and the requirement that the amount of force generated by the openers be eliminated; and

- issue a rule that performance standards be mandatory for all openers sold for use in the United States.

Congressman Gerry Sikorski recently introduced H.R. 4734, The Garage Door Opener Safety Act to force the CPSC to incorporate many of the safety recommendations listed above. If the bill is enacted into law, money will have to be taken from other projects to carry out the requirements of the legislation, unless additional funds are appropriated.

CONCLUSION

It was the intent of Congress when it established the CPSC that the agency would:

- protect the public against unreasonable risks of injury associated with consumer products;
- assist consumers in evaluating the comparative safety of consumer products;
- develop uniform safety standards for consumer products to minimize conflicting state and local regulations; and
- promote research and investigation into the causes and prevention of product-related deaths, illness and injuries.

The CPSC has in the past provided safety benefits to the American public through its use of rulemaking authority and by taking action to remove dangerous products from the marketplace. In order for the Commission to get back to its mission of saving lives, vigorously enforcing its current regulations, and utilizing its Section 15 authority to recall hazardous products, increased funding is vitally needed. We cannot create a risk free world. We cannot create a world in which tragedies don't occur. But we can work to reduce the number one killer of children in this country, unintentional injuries, through effective use of the authority vested in the CPSC. You and your colleagues on the Senate Appropriations Committee have a chance to do just that by providing the Consumer Product Safety Commission with additional resources to do the job you chartered for it.

Thank you for the opportunity to come before you to express the views of the National SAFE KIDS Campaign.

STATEMENT OF LUCINDA SIKES, STAFF ATTORNEY, U.S. PUBLIC INTEREST RESEARCH GROUP

ALL-TERRAIN VEHICLES

Senator GARN. Ms. Sikes?

Ms. SIKES. Thank you.

I'm Lucinda Sikes. I'm a staff attorney with U.S. Public Interest Research Group.

U.S. PIRG is the national lobbying group for State PIRG's across the country and we appreciate this opportunity to express our support for a $50 million annual budget for the CPSC for 1991.

We are particularly concerned that the budget request significantly reduces funds for monitoring of ATV's. The 1988 ATV consent decree has been completely ineffective in preventing death and injuries caused by ATV's, particularly to children. The CPSC should increase efforts to end the needless ATV-related deaths and injuries, not reduce the funds to monitor industry compliance.

The consent decree was designed to keep children off of ATV's, because children under the age of 16 cannot safely operate these machines. But the consent decree is not working. PIRG's across the country surveyed ATV dealers to see if they would be willing to sell an adult-sized ATV for use by a child.

Tragically, a majority of the dealers—54 percent—were willing to do just that. A CPSC study, released about 1 month after our study, came to a similar conclusion. ATV's continue to kill more than 100 children each year and, while injuries have decreased, children continue to be victims in 40 percent of the ATV accidents.

This is not the time to reduce funding for the ATV project. 1991 is the year when the CPSC can seek stronger remedies under the consent decree, and that's why 1991 is the year when the ATV budget should be increased, not decreased.

This subcommittee can play a leading role in improving consumer health and safety by supporting a $50 million annual budget for the Consumer Product Safety Commission. This is a small investment to save hundreds of lives and prevent thousands of injuries from unsafe products.

Thank you.

Senator **Garn**. Thank you.

[The statement follows:]

STATEMENT OF LUCINDA SIKES

Mr. Chairman and members of the subcommittee, I am Lucinda Sikes, a staff attorney for the U.S. Public Interest Research Group (U.S. PIRG). U.S. PIRG is the national lobbying office for state PIRGs around the country. PIRGs are nonprofit, nonpartisan consumer and environmental advocacy organizations. I appreciate this opportunity to express our support for a $50 million annual budget for the Consumer Product Safety Commission (CPSC) in 1991.

The PIRGs have long been active on the state and federal levels in issues relating to product safety. Over the last five years, U.S. PIRG has paid particular attention to the erosion of consumer protection at the CPSC, and we have been actively involved in efforts to reauthorize and strengthen this small, but vital, agency.

The CPSC is responsible for overseeing the safety of about 15,000 consumer products distributed by more than one million companies and associated with approximately 28,000 deaths and 36 million injuries each year. Sadly for millions of injured consumers, over the past decade the Commission has lacked both the commitment and resources to adequately protect the public from unnecessary product hazards. The current funding request of $35.6 million—a funding level $1.7 million below the current services requirement—is yet another crippling blow to product safety and is simply unacceptable.

Americans expect that the products they buy are safe for their intended use. While the current Commission seems to have the commitment to fulfill this consumer expectation, the agency simply cannot carry out this responsibility without adequate funding. This testimony will focus on just two of the many hazardous products that the CPSC must address in 1991: all-terrain vehicles (ATVs) and toxic art supplies. The CPSC must have resources in order to effectively protect American consumers from these and other dangerous products.

THE HAZARDS OF ALL-TERRAIN VEHICLES

We are particularly concerned that the 1991 budget request significantly reduces funds for the all-terrain vehicle (ATV) monitoring project. A recent PIRG study—as well as the most recent death and injury statistics from the CPSC—indicates that the 1988 ATV consent decree has been completely ineffective in preventing deaths and injuries caused by ATVs, particularly to children. The CPSC should increase efforts to end the needless ATV-related deaths and injuries, not reduce the funds to monitor industry and dealer compliance with the consent decree.

One of the primary goals of the 1988 consent decree between the CPSC and the ATV manufacturers is to end the deaths and injuries suffered by children every year due to accidents on ATVs. Since most health professionals and other experts agree that children under the age of 16 cannot safely operate an adult sized ATV (one with an engine larger than 90 cc) the consent decree was designed to keep children off of these vehicles. Recent research reveals, however, that a majority of ATV dealers are not complying with the consent decree.

PIRGs across the country surveyed 215 ATV dealers to see if they would be willing to sell an adult-sized ATV for use by a child. Tragically, a majority of the dealers—54 percent were willing to do just that. A CPSC study of 227 dealers, released about a month after our study, came to a similar conclusion: 56 percent of dealers were willing to sell adult-sized ATVs for use by a 13 year old. At best, these surveys mean that a majority of ATV dealers are sending a mixed signal about the hazards these vehicles pose for children. At worst, due to some ATV dealers' irresponsible behavior, thousands more children will be maimed and killed in ATV accidents.

Since 1982, ATV crashes have killed at least 1477 people and injured 450,000 others; 40 percent of all victims were under 16. There has been no significant reduction in ATV-related deaths since the consent decree. ATVs continue to kill more than 100 children each year. And while injuries have decreased, children continue to be victims in 40 percent of the ATV-related accidents. The CPSC must take more definitive action to protect children from being maimed or killed by these dangerous vehicles.

The CPSC is currently seeking the termination of the franchises of 13 ATV dealers who were willing to sell adult-sized ATVs to children. This is a positive first step, but the CPSC must step up these efforts, not reduce them as the budget request suggests.

This is not the time to reduce funding for the ATV monitoring project. Because 1991 is the year when the CPSC can seek stronger remedies under the consent decree, 1991 is the year when the ATV budget should be increased, not decreased. The consent decree allows the CPSC to proceed administratively under Section 15 of the Consumer Product Safety Act, or Section 15 of the Federal Hazardous Substances Act, "if it determines after December 31, 1990, that a further and more extensive remedy, including recall or repurchase, is warranted." We urge Congress to increase the funding for the CPSC so that the Agency can address the hazards posed by ATVs, particularly to children.

CHRONIC HAZARD LABELING FOR ART AND CRAFT MATERIALS

According to the Commission's budget request, the Hazard Assessment and Reduction program will absorb the most significant budget reductions in 1991. The 1991 Request for this program is almost $700,000 less that the 1990 Appropriation and reduces the program's staffing by eight employees. This reduction is particularly disturbing because, aside from enforcement actions, all agency activities to reduce the unreasonable risk of injury from consumer products take place in the Hazard Assessment and Reduction Program. Implementation of a 1988 law that requires chronic hazard labeling for art supplies is just one of the 21 hazard projects that the CPSC will undertake in 1991, but it illustrates how crucial agency action is in the lives of millions of American consumers.

The PIRGs have long been concerned about the hazards posed by many commonly-used art and craft products that contain substances known to cause cancer and other chronic illnesses. PIRG studies conducted in 1983-87 found that children—who are at high risk from exposure to hazardous substances—were routinely using art materials such as rubber cements, permanent markers and clays and glazes which contain toxic materials in school.

Congress responded to this problem by unanimously passing a law in 1988 that requires labeling of chronically hazardous art and craft materials. The law, the Labeling of Hazardous Art Materials Act, requires the CPSC to develop criteria for evaluating the chronic hazards of art and craft materials and to implement new regulations for art materials to be effective in November 1990.

Although the deadline for the implementation of the labeling law is just seven months away, the Commission has yet to propose any criteria for formal public comment. A delay in implementation and enforcement of this law will mean that consumers, parents and teachers will still not be able to tell whether a product with a label that lists no chronic hazards is safe, or whether it contains substances that present serious long term hazards. Moreover, responsible manufacturers who already label chronically hazardous products will continue to be penalized by having to compete with those who are not properly labeling their materials. We are hopeful that the Commission will be able to begin enforcing the labeling law this November and are committed to working with the agency to see that the law is enforced.

Without the financial resources, the Commission will be hard pressed to carry out the Congressional mandate to improve the health and safety of children, artists, and hobbyists who are exposed to hazardous art products every day without knowing of their potential dangers or of the proper ways to use the products to avoid those dangers.

This subcommittee can play a leading role in improving consumer health and safety by supporting a $50 million annual budget for the Consumer Product Safety Commission. This is a small investment to save hundreds of lives and prevent thousands of injuries from unsafe products. Thank you.

STATEMENT OF PAMELA GILBERT, LEGISLATIVE DIRECTOR, PUBLIC CITIZEN'S CONGRESS WATCH

Senator GARN. Ms. Gilbert?

Ms. GILBERT. Thank you, Senator Garn.

I'm Pamela Gilbert. I'm the legislative director of Public Citizen's Congress Watch.

Public Citizen is a nonprofit membership organization with over 50,000 members across the country.

I, too, appreciate this opportunity to be here to express our support for a $50 million budget for the CPSC for fiscal year 1991.

CHILDREN AND CHILDREN'S LIVES

I'm going to continue the theme of children and children's lives. Dr. C. Everett Koop, when he was Surgeon General, stated:

> If a disease were killing our children in the same proportions that accidents are, people would be outraged and demand that this killer be stopped.

If you look at the facts, you understand why he had such a sense of urgency. Injuries are the No. 1 killer of children. Injury, in fact is the leading cause of death from birth to age 44, and it is the fourth leading cause of death overall. It's also the most expensive health problem in the U.S. today, costing between $75 and $100 billion every year.

Yet, the Consumer Product Safety Commission, which is an agency established to respond to this problem, is under attack. Since its first year of operations, it has seen its budget slashed by more than one-half and its staff reduced by more than one-quarter.

GUTTING OF CPSC

Now, the proposed budget from the administration would cut their budget even further. It represents a funding level $1.7 million less than their current services' requirement. American consumers simply cannot afford the continued gutting of the CPSC.

American consumers believe that the marketplace is safe. They believe that the Government would not allow unreasonably dangerous products to remain on the market. Unfortunately, nothing could be further form the truth. In reality, the agency responsible for preventing death and injury from hazardous products has itself been at death's door due to budget cuts, a lack of leadership, and weakened statutory authority.

The Commission continues to be crippled by inadequate resources. We believe strongly that for the sake of the health and welfare of consumers and their children, the CPSC must be put back on its feet.

Again, that's why we're here today to support a $50 million budget for the CPSC for fiscal year 1991.

Thank you.

[The statement follows:]

STATEMENT OF PAMELA GILBERT

Mr. Chairman and members of the subcommittee, I am Pamela Gilbert, legislative director of Public Citizen's Congress Watch. Public Citizen is a nonprofit membership organization representing over 50,000 members nationwide. Public Citizen represents consumer interests through lobbying, litigation, research and publications.

Since its founding by Ralph Nader in 1971, Public Citizen has fought for safe products, for a healthy environment and workplace, for clean and safe energy sources, for consumer rights in the marketplace and for corporate and government accountability. I appreciate this opportunity to appear today to express our support for increased funding for the Consumer Product Safety Commission (CPSC)

THE CPSC'S VITAL MISSION

"If a disease were killing our children in the same proportions that accidents are, people would be outraged and demand that this killer be stopped." So said Dr. C. Everett Koop while he was U.S. Surgeon General. A look at the facts explains the reason for his sense of urgency.

Injuries are the No. 1 killer of children. In fact, injury is the leading cause of death from birth to age 44, and it is the fourth leading cause of death overall. Injury is also the most expensive health problem in the U.S. today, costing an estimated $75 to $100 billion each year.

Yet, the Consumer Product Safety Commission (CPSC)—an agency established to respond to this number one health problem by protecting the public from the unreasonable risk of injury due to dangerous products—is under attack. Since its first year of operation in 1974, the CPSC has seen its budget slashed by more than one-half and its staff reduced by more than one-quarter.

Now, the "kinder, gentler" administration of President Bush has proposed a CPSC budget for the next fiscal year that will not even keep pace with inflation. According to the agency, the President's proposal represents a funding level $1.7 million than the current services requirement. American consumers simply can not afford the continued gutting of this critical consumer protection body.

In the past, the CPSC has proved to be one of the most cost-effective government agencies. Despite its small size, it has been instrumental in saving hundreds of lives and preventing thousands of injuries from hazardous consumer products, such as flammable children's clothing and non-child-proof household poisons. However, during the 1980's, the agency was forced into a regulatory coma, from which it is still struggling to recover.

THE REAGAN YEARS

In 1981, the Reagan Administration proposed eliminating the CPSC. As David Stockman, then the Director of the Office of Management and Budget, explained at the time, the purpose of abolishing the agency was not to reduce the federal deficit. Rather, Stockman believed that the creation of the CPSC was part of a larger effort to use consumer protection "in order to seize power in our society."

Fortunately, support for consumer protection in Congress and among the American people was strong enough to overcome this misguided perception and preserve the agency. Unfortunately, preservation came at a high cost. During the course of the next eight years, the agency's budget and personnel were drastically cut, its statutory authority was weakened, and a Chairman was named who was not committed to the product safety mission of the agency.

The direct result of the erosion of commitment and resources to consumer product safety was tragedy, pain and suffering for thousands of Americans. The death and injury rate from all-terrain vehicles alone amounts to hundreds of thousands every year, 40 percent to children under 16. The CPSC has known about the unreasonable hazards associated with these killer vehicles since 1985, but to date, the commission has not taken adequate action to prevent such unnecessary tragedies.

Ironically, because of the CPSC's poor track record in recent years, the Congress has been reluctant to support an increase in the agency's budget. Many members of Congress, who traditionally champion the rights of consumers, have not been willing to invest scarce resources in an agency that has failed to meet its consumer protection mandate for so long.

We believe the time has come to revive this troubled department. The agency has a new Chairwoman, and although we have had some differences of opinion with her, she is proving to be seriously interested in putting the CPSC back in the business of consumer product regulation. Furthermore, legislation to reauthorize and strengthen the Commission has already passed the Senate, and it enjoys bipartisan support in the House of Representatives. We are confident that reauthorization legislation will reach President Bush's desk by the end of this year. However, without adequate funding, this promise of a revitalized CPSC will be stopped dead in its tracks.

CPSC CONSUMER PROTECTION ACTIVITIES

The CPSC is currently working on five hazard projects that are critically important to the protection of the public, particularly children. These projects are designed to reduce the toll of death and injury from non-child-proof cigarette lighters, unsafe playgrounds, dangerous swimming and diving facilities, lead in paint mixtures and indoor air pollution, The successful and early completion of these projects alone could prevent hundreds of deaths and thousands of injuries to young children.

For example, each year approximately 300 children under age 5 drown in residential swimming pools and an estimated 4,200 become near-drowning victims. Playground accidents cause another 185,000 emergency-room treated injuries to children under 15 each year. Over 40 percent of these injuries involve pre-school children. And every year, an estimated 150 children under five die in fires caused by cigarette lighters.

According to the CPSC, these projects will need continued funding in 1991. In addition, the commission plans to increase its workload with projects to address fires caused by electric heat tapes, the strangulation hazards of crib toys, and the high annual toll of deaths and injuries due to bicycle accidents. In 1991, the commission will also be engaged in ongoing activities related to all-terrain vehicles, hazard labeling of art materials and choking hazards of toys with small parts.

The CPSC is drastically underfunded at its current budget. And yet, despite an anticipated increase in workload, the agency's proposed budget for 1991 represents a decrease in real dollars. The commission simply cannot fulfill its mandate to protect public health and safety on such a meager budget. Sadly, the result will be more preventable death, injury, heartache and cost for too many American families.

THE CPCS'S BUDGET MUST BE INCREASED

American consumers have confidence in the safety of the marketplace. They believe that the government would not allow unreasonably dangerous to remain on the market. Unfortunately, nothing could be further from the truth.

In reality, for the past decade, the agency responsible for preventing death and injury from hazardous household products has itself been at death's door due to budget cuts, a lack of leadership and weakened statutory authority. We believe these last two ailments are on their way to being cured. However, the commission continues to be crippled by inadequate resources.

For the sake of the health and welfare of consumers and their children, the CPSC must be put back on its feet. We strongly urge you to support a budget of $50 million for this critical consumer protection agency. This amount is roughly equivalent to running the Pentagon for one and one-half hours—surely our children are worth it.

Thank you.

Senator GARN. Thank you very much to all of you for your testimony.

This is unusual. There's another vote going on. We don't usually vote till the Sun goes down, so we can stay around here until 10 or 11 o'clock at night.

But we do appreciate your testimony and I would ask unanimous consent that the statement by Senator D'Amato be placed in the record.

SUBCOMMITTEE RECESS

The subcomittee will stand in recess until May 17, when we will continue hearing testimony from outside witnesses on the fiscal year 1991 budget in this same room, SD-138.

Thank you very much. The subcommittee stands in recess.

[Whereupon, at 12:50 p.m., Wednesday, May 16, the subcommittee was recessed, to reconvene at 10 a.m., Thursday, May 17.

DEPARTMENTS OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT AND INDEPENDENT AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1991

THURSDAY, MAY 17, 1990

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10 a.m., in room SD-138, Dirksen Senate Office Building, Hon. Barbara A. Mikulski (chairman) presiding.

Present: Senators Mikulski, Kerrey, and Grassley.

NONDEPARTMENTAL WITNESSES

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT/ ENVIRONMENTAL PROTECTION AGENCY

STATEMENT OF HON. JOHN McCAIN, U.S. SENATOR FROM ARIZONA

Senator **MIKULSKI**. Good morning, everybody. The subcommittee will come to order.

Today we'll hear testimony from congressional and outside witnesses regarding the proposed budgets for several agencies under this subcommittee's jurisdiction.

Senator McCain, we welcome you, and then we'll move on to our panel.

We want to acknowledge the outstanding role that you've played and I believe you'll be testifying today on the needs of Indian housing, am I correct, Senator?

Senator **McCAIN**. Yes, Madam Chairman.

Senator **MIKULSKI**. Well, let's hear what you've got to say.

INDIAN FUNDING DOWN

Senator **McCAIN**. Thank you, Madam Chair, for giving me this opportunity to appear today on behalf of myself and the chairman of the Select Committee on Indian Affairs, Senator Inouye, to address issues in two budgets before your committee. I appreciate that you have very much to do, Madam Chair, and I will be as brief as possible.

The concern that brings me before your committee is the declining level of appropriations for programs affecting American Indians over the past 15 years, even though their population is rapidly rising.

An analysis prepared by the Congressional Research Service at the request of the Select Committee on Indian Affairs reached these conclusions:

First, in constant dollars, all major spending items, except Indian Health Service, have declined during the period 1975–91.

And second, all Indian-related spending areas have lagged behind their equivalent Federal spending areas.

Madam Chair, that's quite a statement when you think about it: all Federal spending for the last 15 years has increased, some more, some less, except for one category of our spending as far as the Federal budget is concerned and that's for Indian programs.

Meanwhile, Madam Chair, the Indian population has been growing exponentially with a very high birth rate, as you know.

INDIAN HOUSING

Let me just turn to the first spending area of Senator Inouye's and my concern, Indian housing. While Federal spending for housing rose by almost 3 percent annually from 1978 to 1991, Federal spending on Indian housing fell by more than 9 percent each year.

Despite the fact that the incidence of substandard housing among Indians in twice that of other Americans, the administration has requested no new funding for the Indian housing program.

Given the need for at least 53,000 new dwellings in Indian country, my colleagues on the select committee and I urged the Budget Committee to allocate $244 million for 3,000 units of Indian housing in the fiscal year 1991 budget and it has done so.

We would applaud approval of a larger number of units, but we consider 3,000 units the absolute minimum for the coming year and I hope this subcommittee will approve an appropriation for at least that number of units.

With regard to housing, we have a problem with the administration's proposal to nullify the recapture-reuse authority, which I won't belabor you with.

And finally, with regard to housing budget, we urge an increase of $5 million in appropriations for the Indian Community Development Block Grant Program, a program that's very important in Indian country.

INDIAN ENVIRONMENTAL PROTECTION NEEDS

Turning to the second budget category, we'd like to urge you to carefully consider the needs of Indian tribes in your overall appropriation for the Environmental Protection Agency. We applaud you for earmarking $1 million and the 12 FTE's in fiscal year 1990 for surveys of environmental protection needs on Indian lands. Apparently, OMB and EPA have not been able to agree on the use of these funds and personnel.

Madam Chair, on this issue of the EPA, right now all over America people are looking for places to dump their wastes, sometimes toxic, sometimes not so. Indian reservations, as you know, are amongst the poorest economically. So, therefore, they are the most tempted to accept contracts so that these materials can be dumped on their lands.

I do not believe that it is the responsibility of Congress to prevent such a thing. But I do believe that it is our responsibility to provide them with as much help and assistance from the Environmental Protection Agency so that we don't turn our Indian reservations into dumping grounds for toxic wastes.

Finally again, Madam Chair, I thank you for your time. I hope that some time you would have the opportunity to travel with me and Senator Inouye. I could take you to Indian reservations where people are living in holes in the ground, where entire families are living in holes in the ground. It's a disgrace, a national disgrace, and one which I think needs to be rectified.

And Madam Chair, as I say that, I fully recognize that just more money and more housing units doesn't always solve the problem; we would have solved the problem of public housing years ago. But I do believe we have fallen far below the minimum level that native Americans need to begin to address the issues of adequate housing for native Americans.

Madam Chair, I appreciate the continued support and sympathy you have displayed toward native Americans and am grateful for the opportunity for you to allow me to make these remarks.

Senator MIKULSKI. Well you're quite welcome, Senator. As you know, last year we moved—this committee moved for the first time to really create new housing for native Americans and we're going to do our best this year.

I think the assertiveness in which we acted was due to you, Senator Inouye, and Senator DeConcini, who certainly pressed people to give me the money to be able to do this and we're going to be listening shortly to the people who are most affected.

We'll look forward to you also not only increasing the supply of housing but improving the quality of life of fellow Americans and perhaps learning from some other HUD programs.

One of the areas we're talking about is Gateway, which is that some of our assisted housing was not to be a way of life but a way to a better life, and it's those kinds of programs that we'll be working on.

Thank you very much for your testimony.

Senator MCCAIN. Thank you, Madam Chair.

[The statement follows:]

STATEMENT OF SENATOR JOHN McCAIN

THANK YOU, MADAM CHAIRMAN, FOR GIVING ME THIS OPPORTUNITY TO APPEAR TODAY ON BEHALF OF MYSELF AND THE DISTINGUISHED CHAIRMAN OF THE SELECT COMMITTEE ON INDIAN AFFAIRS, SENATOR INOUYE, TO ADDRESS ISSUES IN TWO BUDGETS BEFORE YOUR COMMITTEE. I APPRECIATE THAT YOU HAVE MUCH TO DO, AND MY REMARKS WILL BE BRIEF.

THE CONCERN THAT BRINGS ME BEFORE YOUR COMMITTEE IS THE DECLINING LEVEL OF APPROPIATIONS FOR PROGRAMS AFFECTING AMERICAN INDIANS OVER THE PAST FIFTEEN YEARS, EVEN THOUGH THEIR POPULATION IS RAPIDLY RISING. AN ANALYSIS PREPARED BY THE CONGRESSIONAL RESEARCH SERVICE (AT THE REQUEST OF THE SELECT COMMITTEE ON INDIAN AFFAIRS) REACHED THESE CONCLUSIONS:

> FIRST, "...IN CONSTANT DOLLARS, ALL MAJOR SPENDING ITEMS EXCEPT I.H.S. HAVE DECLINED DURING THE PERIOD 1975-1991."
>
> SECOND, "...ALL INDIAN-RELATED SPENDING AREAS HAVE LAGGED BEHIND THEIR EQUIVALENT FEDERAL SPENDING AREAS."

THIS SAID, LET ME TURN TO THE FIRST SPENDING AREA OF OUR CONCERN: INDIAN HOUSING. WHILE FEDERAL SPENDING FOR HOUSING ROSE BY ALMOST 3 PERCENT ANNUALLY FROM 1978 TO 1991, FEDERAL SPENDING FOR INDIAN HOUSING FELL BY MORE THAN 9 PERCENT EACH YEAR.

DESPITE THE FACT THAT THE INCIDENCE OF SUBSTANDARD HOUSING AMONG INDIANS IS TWICE THAT OF OTHER AMERICANS, THE ADMINISTRATION HAS REQUESTED NO NEW FUNDING FOR THE INDIAN HOUSING PROGRAM. GIVEN THE NEED FOR AT LEAST 53,000 NEW DWELLINGS IN INDIAN COUNTRY, MY COLLEAGUES ON THE SELECT COMMITTEE AND I URGED THE BUDGET COMMITTEE TO ALLOCATE $244 MILLION FOR 3,000 UNITS OF INDIAN HOUSING IN THE FISCAL 1991 BUDGET, AND IT HAS DONE SO.

WE WOULD APPLAUD APPROVAL OF A LARGER NUMBER OF UNITS, BUT WE CONSIDER 3,000 UNITS THE ABSOLUTE MINIMUM FOR THE COMING YEAR, AND I HOPE THIS SUBCOMMITTEE WILL APPROVE AN APPROPRIATION FOR AT LEAST THAT NUMBER OF UNITS.

WITH REGARD TO HOUSING, WE ALSO URGE THIS COMMITTEE TO REJECT THE ADMINISTRATION'S BUDGET PROPOSAL TO NULLIFY THE "RECAPTURE-REUSE" AUTHORITY PROVIDED IN THE 1988 INDIAN HOUSING ACT. IF HOUSING UNITS ARE RESERVED FOR A SPECIFIC SITE BUT THEN CANNOT BE BUILT, LET THOSE UNITS BE RESERVED FOR USE ELSEWHERE IN INDIAN COUNTRY-- AS THE CONGRESS DIRECTED IN 1988.

FINALLY, WITH REGARD TO THE HOUSING BUDGET, WE URGE AN INCREASE OF $5 MILLION IN APPROPRIATIONS FOR THE INDIAN COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM, A PROGRAM THAT FIGURES VERY IMPORTANTLY IN ENCOURAGING ECONOMIC DEVELOPMENT IN INDIAN COUNTRY. MERITORIOUS PROPOSALS EACH YEAR FROM TRIBES HAVE FAR EXCEEDED THE $27 MILLION THAT HAS BEEN APPROPRIATED. THE INCREASE WE ARE URGING, I MIGHT ADD, IS WITHIN THE OVERALL INCREASE OF $480 MILLION RECOMMENDED BY THE BUDGET COMMITTEE.

TURNING TO THE SECOND BUDGET CATEGORY, WE ALSO WANT TO URGE YOU TO CAREFULLY CONSIDER THE NEEDS OF INDIAN TRIBES IN YOUR OVERALL APPROPRIATION FOR THE ENVIRONMENTAL PROTECTION AGENCY. WE APPLAUD YOU FOR EARMARKING $1 MILLION AND 12 F.T.E. IN FISCAL YEAR 1990 FOR SURVEYS OF ENVIRONMENTAL PROTECTION NEEDS ON INDIAN LANDS. UNFORTUNATELY, O.M.B. AND E.P.A. HAVE APPARENTLY NOT BEEN ABLE TO AGREE ON THE USE OF THESE FUNDS AND PERSONNEL. WE WOULD ASK THAT YOU CONTINUE TO PROVIDE RESOURCES TO E.P.A. FOR THESE NECESSARY SURVEYS.

I NOTE WITH INTEREST THAT E.P.A. IS SPENDING ABOUT ONE-TENTH OF ONE PERCENT OF ITS ANNUAL APPROPRIATIONS ON INDIAN LANDS. FOR FISCAL YEAR 1989 THAT AMOUNTED TO ABOUT $7 MILLION. VIRTUALLY

EVERY INDIAN RESERVATION IN THIS COUNTRY IS UNDER PRESSURE TO ACCEPT TOXIC AND HAZARDOUS WASTES. BECAUSE OF THE PERVASIVE POVERTY ON THE RESERVATIONS, THE POTENTIAL REVENUES FROM WASTE DISPOSAL ARE VERY ATTRACTIVE. WE NEED TO DO MUCH MORE TO ASSIST THE TRIBES IN THE DEVELOPMENT OF ENVIRONMENTAL STANDARDS AND REGULATORY PROGRAMS. WE REQUEST THAT YOU CONSIDER EARMARKS FOR TRIBAL GOVERNMENTS FOR FISCAL YEAR 1991 OF AT LEAST ONE PERCENT UNDER EACH OF THE SPECIFIC PROGRAMS WITHIN E.P.A.

FOR MYSELF AND SENATOR INOUYE, I THANK YOU FOR YOUR CONTINUED CONCERN AND SUPPORT FOR THE INDIAN TRIBES.

Senator **MIKULSKI**. Now I'm going to call the next panel, or ask my chief of staff to call the next panel while I have to make one phone call and then we'll proceed.

Kevin, do you want to invite our first panel?

Mr. **KELLY**. We'd like to have the panel scheduled as the first panel to come forward:

Mr. Ralph Goff, Mr. George Nolan, Mr. Jacob Viarrial, Wesley Martel, Terry Dumont, and Freddie Kaydahzinne—forgive my pronunciation if I erred there. They are representing respectively the Campo Bank of Mission Indians, the National American Indian Housing Council, the Pueblo of Pojoaque, the Shoshone and Arapaho Tribes, the Crow Tribal Housing Authority, and the Mescalero Apache Tribe.

Gentlemen, why don't you begin and introduce yourselves and if your colleagues come during the time that is remaining on this first panel, we will allow them to testify. If not, we'll move to the next panel of witnesses.

As the chairman noted at the beginning, you'll have 2½ minutes for your oral presentation and your written statements will be, by unanimous consent, included in the record.

So if you'd proceed.

Mr. Goff?

[No response.]

Mr. **KELLY**. OK. Mr. Nolan?

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

STATEMENT OF FRANCIS HARJO, INFORMATION SPECIALIST, NATIONAL AMERICAN INDIAN HOUSING COUNCIL

Mr. **HARJO**. My name is Francis Harjo and I'm sitting in for Mr. Nolan, who is the chairman of the National American Indian Housing Council.

My name is Francis Harjo, I'm the information coordinator for the National American Indian Housing Council. I am also a member of the Paiute-Shoshone Tribes of the Duck Valley Indian Reservation in Owyhee, NV.

The National American Indian Housing Council is a nonprofit organization comprised of 180 Indian and Alaska Native housing authorities working toward making decent housing possible for all Indian and Alaska Native people. NAIHC's membership of 180 IHA's represents 199 Alaska Native villages and 252 tribal governments. In 1988 there were approximately 1.7 million American Indians and Alaska Natives in the United States. About one-half lived either on reservations or in other Indian areas.

Senator Mikulski, the National American Indian Housing Council requests funding and support for 6,000 units of HUD Indian housing in fiscal year 1991.

The Bureau of Indian Affairs housing needs survey in 1989 showed approximately 93,000 Indian families in need of housing assistance; in 1970, the figure was 63,000.

INDIAN HOUSING NEEDS DOCUMENTED

NAIHC is currently conducting a series of citizen hearings to document the need for Indian housing. The Bureau of Indian Affairs conducts annually a housing needs survey that HUD uses to determine an allocation of funds for the Indian housing program. In two hearings held in Oklahoma this year, testimony has revealed the BIA survey results are too low and that the need for housing assistance is much higher.

We are asking for your support of 6,000 units of Indian housing to strengthen Indian reservation economies, promote employment and development, and provide incentives for individuals to better their lives and living conditions and provide a healthier and affordable environment in which to raise their children.

We are also asking members of this subcommittee and the chairman to come out to Indian country and visit to see what living conditions are there. We ask that they would come with us some time to see what really is there.

Mr. **Kelley**. Thank you.

[The statement follows:]

Statement of Francis Harjo

Senator Mikulski, and members of the Subcommittee on VA-HUD and Independent Agencies, thank you for this opportunity, on behalf of the National American Indian Housing Council (NAIHC) to provide comment on the fiscal year 1991 Indian housing appropriations. My name is Francis Harjo, I am the Information Specialist of the National American Indian Housing Council and I am also an enrolled member of the Paiute-Shoshone Tribes of the Duck Valley Indian Reservation in Owyhee, Nevada.

The National American Indian Housing council is a non-profit organization comprised of 180 Indian and Alaska Native housing authorities working toward making decent housing possible for all Indian and Alaska Native people. NAIHC's membership of 180 IHA's represents 199 Alaska Native villages and 252 Tribal governments. In 1988 there were approximately 1.7 million American Indian and Alaska Natives in the United States. About half lived either on reservations or in other Indian areas.

Senator Mikulski, the National American Indian Housing Council requests funding for 6,000 units of HUD Indian Housing ($450 million) in fiscal year 1991.

In 1980 almost one-quarter of all American Indians and Alaska Natives lived in housing that was decayed, substandard, or grossly overcrowded or in need of basic plumbing facilities. Today hundreds of Indian homes are so deteriorated that thorough rehabilitation is required to meet an Indian family's needs. Indian homes by the thousands can not be rehabilitated and must be completely replaced. Recent funding for Indian housing provides minimal assistance and yet the need for housing Indian people increases each year.

The Bureau of Indian Affairs 1989 annual housing needs survey shows approximately 93,000 Indian families in need of housing assistance. In 1970, the figure was 63,000. Despite the statistics for need, the current and last Administrations' proposed budgets recommended little to offset or correct the housing shortage.

According to a Congressional Research Service Report "Trends in Indian-Related Federal Spending, Fiscal Year 1975–1991," Indian housing trends in the Reagan and Bush Administrations (Fiscal Year 1982–1990) have fallen at an annual rate of $45.7 million or minus 19.9 percent on an average level of $228.7 million, while overall HUD spending has stayed almost the same, growing about $5.9 million a year on an average of $16.3 billion.

Senator Mikulski, with your support in fiscal year 1990, Indian housing received 1800 units to address 2 percent of the housing need in Indian Country. But, this year, as in the past, the Administration proposed zero funding for fiscal year 1991 Indian Housing Programs. This is in spite of the fact that substandard housing in Indian country represents 2 percent of the nation's substandard housing, while the Indian population is only one-half percent of the nation's total population. Put another way, nearly 23.3 percent of housing in Indian country is classified as substandard, while the percentage of such housing nation wide is only 6.4 percent (from the 1980 Census).

If adequate funding is not made available this year to address the housing needs of Indian people, we will prolong the problems of homelessness, overcrowding and underdevelopment of Indian communities. Where, according to the Indian Health Service, alcoholism and fetal alcohol syndrome death rates for American Indians and Alaska Natives is three times the national average and suicide rates for Indian teenagers is eight times that of all other races.

The U.S. Census reports that unemployment in many Indian areas reaches 75 to 80 percent. Unemployment rates like this make financing a home through local lenders impossible.

NAIHC is currently conducting a series of citizen hearings to document the need for Indian housing. The Bureau of Indian Affairs conducts annually a housing inventory survey that HUD uses to determine an allocation of funds for the Indian Housing Program. In two hearings held in Oklahoma this year, testimony has revealed the BIA survey results are too low and that the need for housing assistance is much higher.

Recently, the Metlakatla Housing Authority questioned HUD as to its decision to request no funding for new construction in the fiscal year 1991 Budget. HUD responded, "The decision reflects a Departmental decision to concentrate its efforts and scarce monetary resources on the rehabilitation of existing housing stock. The Indian Rental program currently has a vacancy rate of slightly more than seven percent. This represents over 1,500 units that are not being used to house eligible families."

According to an April 12, 1990 occupancy report from HUD, the vacancy rate for both mutual help and rental units administered by IHA's is 4.7 percent. This vacancy rate is normal turnover. Any public housing authority would passionately embrace a 4.7 percent vacancy rate. Last week I attended a Board of Directors meeting for the United South and Eastern Tribes (USET). During a meeting of the housing committee, members questioned the validity of HUD's vacancy rate because none of the housing authority directors present had vacant units in their authorities!

HUD has also responded there are 9300 units in the development pipeline. These units are there because of the development process that takes from two to four years for delivery of new units. Additional units are needed to keep the delivery system working in the remote rural areas of Indian Country.

The HUD Indian Housing program is a well managed program that has shown success and growth over the years. For instance, in fiscal year 1989, 120 of 180 IHA's scored 70 percent or better in the Administrative Capabilities assessment (ACA). ACA is a HUD mechanism of evaluating management and for determining annual funding awards. The Indian Housing Program is effective and working to provide homes to the Indian and Alaska Native populations that rely on HUD housing for nearly all their housing needs, yet the Indian housing program is zeroed-out annually.

Madam Chairman and members of the Subcommittee on VA-HUD and Independent Agencies, support our request of 6,000 units of Indian Housing to strengthen Indian reservation economies, promote employment and development, and provide incentives for individuals to better their lives and living conditions and provide a healthier and affordable environment in which to raise their children.

The National American Indian Housing Council also requests your support of a 2 percent set-aside in the Housing Opportunity Program (HOP) as proposed in S. 566, the National Affordable Housing Act. This set aside would provide another vehicle to promote homeownership on trust lands for Indian people.

We thank you for your support of the National Commission on American Indian, Alaska Native and Native Hawaiian Housing. This Commission will evaluate the elements adversely impeding the development of safe and affordable housing for American Indians, Alaska Natives and Native Hawaiians and can be of great help in meeting the housing needs of Indian people.

We also invite you and members of the Subcommittee to come and visit Indian Country. Go with us to meet the Indian people you are serving and see what's being done with Indian housing and what needs exist. Thank you for your attention and for the opportunity to speak with you.

Mr. **Kelly**. Mr. Viarrial?

[No response.]

Mr. **Kelly**. OK.

Mr. Martel?

STATEMENT OF RICK WEST, ON BEHALF OF THE SHOSHONE INDIAN TRIBE

Mr. **West**. My name is Rick West and I'm a member of the law firm of Grover, Stetson, Williams & West, which represents the Shoshone Indian Tribe, of whom Wesley Martel is a member, and I'm appearing on behalf of the tribe and in place of Mr. Martel.

I will not repeat the information which has already been presented in the written statement. I will simply highlight some of the most important points raised in that testimony.

I think the numbers speak for themselves. Specifically on the Shoshone Reservation, at the present time, there are approximately 200 families on the waiting list for low-rent housing and approximately 300 families on the waiting list for the Mutual Self-Help Program. At the same time, the tribe has only 20 Indian housing units in the pipeline for each of these two programs. Obviously the need is overwhelming on the Wind River Reservation for adequate housing for members of the tribe.

These numbers, I might emphasize, are simply reflective of problems which exist on a far greater scale nationally. On the Wind River Reservation, according to the survey of the Bureau of Indian Affairs, there are needs for 491 new units at the present time. That's just on the Wind River Reservation. Nationwide, the same survey found that approximately 90,000 Indian families are without adequate housing at the present time.

These needs are great. We appreciate this subcommittee's support in the past. In light of all of these figures which I have just given you, our view, as indicated in our testimony, is that at the minimum 3,000 units should be authorized and funds appropriated by the subcommittee.

Again, we appreciate this opportunity to present ourviews and we're happy to respond to any questions that you may have.

[The statement follows:]

STATEMENT OF WESLEY MARTEL, COCHAIRMAN, SHOSHONE BUSINESS COUNCIL, WIND RIVER RESERVATION

My name is Wesley Martel and I am the Co-Chairman of the Shoshone Business Council, the day-to-day governing body of the Shoshone Tribe of the Wind River Reservation in Wyoming. I am appearing here today on behalf of the Shoshone Tribe to address a matter of great importance to the Tribe--the critical housing shortage that exists not only on our Reservation, but throughout Indian country. As I will discuss in more detail below, the Shoshone Tribe is concerned specifically about the number of housing units for which appropriations are to be made in the upcoming year. We respectfully urge this Subcommittee to authorize appropriations for the construction of 3000 Indian housing units for Fiscal Year 1991.

Since 1980, Indian Housing Program appropriations have declined dramatically from funding for 6000 units to funding for 1000 units in Fiscal Year 1989; as you know, Congress appropriated funds for nearly 1800 units in Fiscal Year 1990. As you also know, the Administration has proposed no funding for new construction of Indian housing for the last two years. Zero units is an unacceptable proposal. In fact, last year's appropriations for 1800 new units minimally addresses the severe housing problems present on Indian reservations, particularly since approximately 250 federally-recognized tribes compete for these units. Although the Shoshone Tribe is grateful, the appropriation provided mere "bandaid" treatment to the housing shortage in Indian country.

The Bureau of Indian Affairs survey of housing needs in Indian country for 1989 indicated that over 90,000 Indian families are without adequate housing. According to a 1989 Consolidated Housing Inventory prepared by the Bureau of Indian Affairs, Billings Area, 491 new units were required to meet the housing needs of Indian families on the Wind River Reservation. Based on the number of young people entering the housing market each year, the Tribe believes that the actual number far exceeds that figure and will continue to rise unless increased funding is appropriated now. We are encouraged by the fact that Secretary Kemp recognizes the need for more federal support for public housing. We hope his concern also will address the unmet housing needs of the "first Americans" as well.

The Wind River Housing Authority administers Indian Housing Programs for the benefit of members of the Shoshone and Arapaho Tribes. The Wind River Reservation currently has approximately 200 families on the Low-Rent waiting list and 300 families on the Mutual Self Help waiting list. The Tribes have only 20 Indian housing units in the pipeline for each of these programs, and are in the process of putting the units out for bid. Construction of these units, however, will barely make a dent in the waiting list.

In conclusion, the Tribe regards seriously the need to provide adequate housing for its tribal members. Such housing cannot be provided without the requested increase in federal funding. To provide meaningful assistance in addressing critical Indian housing problems the Shoshone Tribe respectfully urges that the Committee appropriate funding for the construction of a minimum of 3000 new units for Indian housing programs in Fiscal Year 1991.

On behalf of the Shoshone Tribe, Mr. Chairman, I wish to express our appreciation for this opportunity to appear before the Subcommittee. At this time I would be happy to respond to any questions which you or other members of the Subcommittee may have regarding my testimony.

Senator **Mikulski**. Terry—let's see, Terry Dumont is not here, I believe, from the Crow Tribal Housing Authority.

[No response.]

Senator **Mikulski**. I see.

Now we want to welcome the spokesman for the Mescalero Apache Tribe.

And someone with a name like Mikulski understands how people sometimes don't know how to pronounce my name. Could I have a lesson from you, sir?

STATEMENT OF FREDERICK PESO, COMMISSIONER, APACHE TRIBE OF THE MESCALERO RESERVATION HOUSING AUTHORITY

Mr. **Peso**. My name is Frederick Peso, I'm the executive secretary of the tribal council and also a commissioner of the Tribal Housing Authority and our director, Freddie Kaydahzinne, was unable to attend today so I was asking if I could speak in his behalf for the tribe.

Thank you.

Senator **Mikulski**. Commissioner Peso, please proceed with your testimony.

Mr. **Peso**. Thank you.

I also have submitted some documents for your review and I will just go—for the purpose of time, I know you're real busy, and I would just go ahead with some of the problems that we do have on the Reservation.

Senator **Mikulski**. Mr. Peso, let me say this and to other members testifying and to others, we are moving at a brisk pace today to accommodate the number of public witnesses. However, you're most welcome to support amplification documents for your testimony, those things that detail and tell the story that you're so cooperatively condensing for us today.

Mr. **Peso**. Thank you.

Senator **Mikulski**. So please proceed.

Mr. **Peso**. OK.

We are aware that the President has asked for zero-based funding for this year and also for last year and was able to include some additional housing for 1,800, and we also support the request for 3,000 homes this year—units this year.

And if the housing is going to be cut, we're going to be affected also. We are at this time in need for about 130 homes that tribal members would need. We have——

Senator **Mikulski**. Mr. Peso, do you want to pull that microphone up a little bit, please.

Mr. **Peso**. OK; how's that?

Senator **Mikulski**. Much better, sir.

DEPLORABLE HOUSING CONDITIONS

Mr. **Peso**. We have a population of about 3,300 people on the reservation, about 30 percent of them are without housing, and the people that are not in the homes are having to move in with relatives or either live in tents and lean-tos during the summertime and sometimes during the winter. And we have as many as 12 people living in small homes because the families can't afford to—

there are no homes. The only type of housing that we do have on the reservation are the HUD houses and there are no other homes except some of the older homes that were built back in 1934 and there's only very few of those.

And right now our tribal population is about 50 percent under 18 years of age and if we don't get the housing that we need now for the people, the existing—housing for the people that are existing now, and then with the population explosion, we're going to be quite behind on having the housing—having a large housing shortage. So we're very concerned about getting some new houses and to be able to keep up.

We have been trying to get all of our housing—all of our people in decent housing. And if this is cut, we're going to be further behind than we ever were.

I would like to invite you to come to our reservation and see some of the situations that we have there.

Senator **Mikulski**. Well thank you for the invitation. It would seem to be a most—more than an interesting trip but certainly one that would be compassionate.

The committee is aware that the Indian housing needs are at least for 90,000 new units, I believe that's the waiting list nationwide. And that where units do currently exist the units themselves, because of the lack of money for rehab and maintenance, have fallen into decline.

So in one way there is a terrific demand but, at the same time, for those who currently have federally assisted housing on reservations, we've been less than adequate in helping maintain that, which in many ways are an eyesore; am I correct in that?

Mr. **Peso**. Yeah.

Senator **Mikulski**. Well we thank you for your testimony. We're going to certainly do what we can. I know that the Senators representing the great Southwest, the men that I just also mentioned, as well as the chair of the Indian Affairs Committee, Senator Inouye, have been very assertive also in articulating these needs. But thank you for telling them in your own personal story.

[The statement follows:]

STATEMENT OF FREDERICK PESO

Madam Chairman, members of the Committee, my name is Frederick Peso. I am a Commissioner of the Apache Tribe of the Mescalero Reservation Housing Authority and Secretary of the Mescalero Tribal Council. In response to the zero funding for Indian Housing programs proposed by the Administration, I am here to urge the Subcommittee to appropriate funding for the construction of 3000 new units for the Indian Housing program in fiscal year 1991.

The Mescalero Reservation lies in the mountains of south-eastern New Mexico. Almost 30% of our three thousand tribal members have no homes of their own and no place to live. According to estimates of the Bureau of Indian Affairs, Albuquerque Area, 125 of our families needed housing in 1989. Although some HUD officials have suggested that the vacancy rate in Indian housing is high, we do not have one vacancy in our Indian Housing program.

The homelessness problem on the Mescalero Reservation is different from the homelessness problems present in urban areas. First, unlike the homeless in the cities, Mescalero Apache people cannot look for housing nearby, as no housing exists. The homeless are often forced to leave the Reservation, their families, their community, and their way of life, in search of housing. The nearest towns are Ruidoso--a resort town best known for hosting a million dollar quarterhorse race--and Alamogordo--a military town. Neither community offers attractive housing opportunities for our tribal members; finding an affordable house in a resort town is difficult at best, and finding housing in a military town usually requires some connection with the military. So our tribal members must move farther and farther from home to find a place to live.

Second, while occasionally we hear of a homeless Indian family forced to live in a car, Indian people tend to honor their obligations to family and community without question, and homeless families are taken in by friends and relatives. This causes the homes of friends and relatives to become severely overcrowded. Recently, we had a family of twelve living in a one bedroom mobile home. The Housing Authority was able to find limited funds with which to build a small two bedroom home in which the family currently lives, but the cramped living conditions are extreme. It is not unusual for many of our people to sleep every night on the floor; some sleep outside in tepees and under lean-tos made of branches, even during the winter. Overcrowding is not just unpleasant. It means that husband and wife never have the privacy that they need; that students do not have a place or the solitude necessary for effective study; and that the illnesses to which children are so susceptible spread throughout families with frequency. The unnatural crowding cannot help but strain relationships and tempers and undermine most if not all attempts to lead a decent and productive life. Moreover, the problem of overcrowding is getting worse instead of better. Half of our tribal members are under eighteen, and soon these young people will be having families of their own. The housing crisis we are experiencing today will double in severity almost overnight, and we are trying desperately to find ways to meet this threat. The overcrowding has made impossible demands on our two sewer lagoons. The newer lagoon is at capacity, and the older is over capacity, causing heightened concerns about seepage into the underlying water which finds its way down the mountain to the non-Indian communities. We cannot afford to ignore any of these problems.

Our Housing Authority administers 414 HUD homes on the Mescalero Reservation, most of which are low rent units. While these units tend to have heat, running water, and electricity, many of the other houses and apartments on the reservation do not. Water must be hauled in daily for cooking, washing, and drinking. Where the houses do not have running water, the families must rely on outdoor privies, an inconvenience at best and a torment in our frigid mountain winters. Even the HUD houses which our

Housing Authority builds and maintains are inadequate in many ways; our newest project features only one door per house because we simply didn't have enough money to provide two, and many of the streets and driveways are not paved, causing inaccessibility and terrible inconveniences when it rains or snows. Approximately 75% of our houses need renovations due to settling problems, poor construction, and poor design.

As you know, the Administration has proposed zero funding for constructing new units of Indian housing in Fiscal Years 1990 and 1991. Such proposals cannot be justified. Last year Congress appropriated funds for 1800 new units; however, given the proven need for housing that has been presented by Indian witnesses year after year, 1800 units are inadequate; to propose zero units is callous and unthinkable.

We understand that there is a nationwide need for housing, but the need is particularly severe on reservations. We are not asking for big homes or vacation homes or fancy homes; we are not asking for a bedroom for every family member; we are not asking for playgrounds and community centers, even though we, too, would like to have these amenities for our families. What we are asking for is a minimum of standard homes for our people. Thus, we respectfully request an appropriation sufficient to construct 3000 new units to be parceled out in Indian Country in order to alleviate the despair and suffering caused by overcrowding and substandard housing. Indian Housing Authorities are required by federal law to provide "decent, safe, and sanitary housing" on the reservations, and we cannot do it. We simply do not have the money to provide even the minimum. While we support this country's attempt to deal with the deficit and to climb out of the hole of debt which has grown deeper over the years, it is our hope that this Subcommittee will seek ways to cut appropriations from those for whom a cut will be an inconvenience, not from Indian Housing Authorities, for whom a cut will be a devastating blow.

A final issue I would like to raise with you concerns the so-called "thirty percent rule." Under this rule, participants in low-rent housing projects must pay thirty percent of their adjusted income as rent. This rule works tremendous hardships on reservations, where there is no housing available other than HUD-assisted housing, and where food, transportation, and fuel costs are unusually high. Moreover, our participants get no relief under the "ceiling rents" provision. HUD policy is to compare rents on the reservations to rents in surrounding communities in determining ceiling rents. In Mescalero's case, this means that rents on the Reservation are compared to rents in the City of Ruidoso--a resort community--and the City of Alamogordo--a community in which an Air Force base is the primary employer. As a result of the unusual nature of these towns, rents are unusually high; the ceiling rents established under the HUD policy, therefore, are unusually high, and the ceiling rents provision has not helped to ease the problem of high rents on the Reservation. I would appreciate the support of members of this Committee for legislation that would require reasonable rents for rental housing program participants.

Thank you for providing the Apache Tribe of the Mescalero Reservation Housing Authority this valuable opportunity to express its frustration and to make this request for badly needed Indian housing appropriations. And now, I will be happy to try to answer any questions which you may have concerning our housing situation at Mescalero.

Senator **Mikulski**. We now would like to call Conrad Husera of the Southwest Indian Authority; Carla Green, Laguan Housing Authority; David Harrison, the Council of Energy Resource Tribes; Christine Carosella, Mortgage Insurance Companies of America; and James Ethridge of the American Association of Homes for the Aging.

You're Miss——

Ms. **Carosella**. Carosella.

Senator **Mikulski**. From the Mortgage Insurance Companies.

So the Southwest Indian Authority isn't here?

[No response.]

Senator **Mikulski**. Clara Green is not here?

[No response.]

Senator **Mikulski**. Dave Harrison?

[No response.]

Senator **Mikulski**. The tribal representatives are not here. Perhaps they'll join us as we proceed.

STATEMENT OF CHRISTINE CAROSELLA, MORTGAGE INSURANCE COMPANIES OF AMERICA

Senator **Mikulski**. Ms. Carosella, why don't you start and let's hear from the Mortgage Insurance Companies and then we'll go on to Mr. Ethridge, a fellow Baltimorean, and we welcome both of you.

Ms. Carosella?

FHA PROGRAM

Ms. **Carosella**. Thank you for the opportunity to testify before this subcommittee.

Our Nation needs a strong FHA program to serve low- and moderate-income home buyers. The three keys to rebuilding FHA are, first, adequate downpayments; second, more flexible pricing structures; and, third, strong risk management.

Simply raising the limits does nothing to help the financial strength of this program. In fact, our industry data indicate that higher loans carry additional risk. Certainly they will not help to strengthen the fund.

One of the primary reasons FHA is losing money is more and more people are putting very little of their own money into the home. It's basic: downpayment drives default. If very low downpayment loans are combined with very high loan amounts, FHA's losses will continue to grow and further add to the deficit.

This is the reason that statistics from the National Association of Realtors are alarming. The average FHA downpayment has dropped from 14.6 percent in 1984 to 5.3 percent in 1988. This has been FHA's traditional cross-subsidy: high downpayments financing low downpayments.

The highest FHA loan-to-value ratio should be 97 percent of the first $25,000, and 95 percent of the balance. You have to reduce the risk of the present program or you have to increase the premium. FHA should charge an actuarily sound premium.

AFFORDABILITY PROBLEM

Raising FHA's loan limits will not help families who need help purchasing homes. In fact, only families earning more than $50,000, those in the top 20 percent of this country, can afford to purchase a home at the current FHA limit of $124,875. Three-quarters of the population earn less than $40,000, and that's the group with declining home ownership. That's the group faced with an affordability problem. That's who FHA should serve.

FHA should be targeted by income. This is the only way to ensure that it helps low- and moderate-income families become homeowners. We would be happy to work with Congress and the administration on resolving FHA's problems. A strong FHA is essential in a strong mortgage finance system.

Thank you.

Senator **Mikulski**. Thank you very much, Ms. Carosella.

[The statement follows:]

STATEMENT OF CHRISTINE CAROSELLA

Mr. Chairman and Members of the Subcommittee: The Mortgage Insurance Companies of America (MICA) appreciates the opportunity to testify before this subcommittee. We are particularly concerned with the financial soundness of the Federal Housing Administration's single-family mortgage insurance program (FHA). FHA plays an important role in housing America. MICA believes our nation needs a strong, viable FHA program to serve low- and moderate-income homebuyers. To operate in today's environment, FHA must find a balance between its social role and its financial responsibilities.

MICA's testimony today will outline some of the problems the industry sees with FHA and then highlight some solutions to FHA's problems. MICA urges this subcommittee not to raise FHA's loan limits. FHA is experiencing financial problems and the Administration, Congress and those in the housing industry must be given time to develop solutions to its problems.

FHA'S FINANCIAL SOUNDNESS

Unfortunately recent evidence reveals that the Mutual Mortgage Insurance Fund (MMIF), which supports the single-family mortgage insurance program, is in financial trouble. There are several ways to measure FHA's financial stability. The first way is to examine the MMIF's overall financial performance in any one year. A GAO audit found that the MMIF actually lost $1.4 billion in 1988, reducing the Fund's equity to only $1.8 billion. The remaining equity at year-end 1988 was little more than 1988's operating loss. In addition, the MMIF's equity dropped by almost half in 1988, from $3.4 billion to $1.8 billion, while the amount of mortgages insured by the Fund increased by 11.5 percent in 1988 to $229 billion. In other words, the amount of risk to equity has doubled.

The second way to analyze FHA's financial stability is to track claims and loss rates over a period of time. An examination of claims data provided by HUD indicates that for the past decade, FHA experienced losses far greater than its premium is priced to support. The HUD actuary has determined that the 3.8 percent mortgage insurance premium can support just 8.7 percent out of every 100 loans going to claim. However, from 1979 to 1985, FHA's business failed to perform at or below this break-even claim rate. Although the 1986 and 1987 books are not fully seasoned, early performance indicates that this business also will exceed the break-even point. MICA expects that loans insured by FHA for the nine year period have, or ultimately will have, a cumulative claim rate ranging from 13 to 26 percent.

Finally, it is important to analyze the ability of the MMIF to spread risk. Raising FHA's loan limits will not enable losses on higher balance loans to cross-subsidize losses on lower-balance loans. Because loans insured by FHA in the past decade have or, ultimately will have, claim rates from 13 to 26 percent (whereas its pricing can support an 8.7 percent claim rate) to effectively cross-subsidize losses and have positive impact on the MMIF, any new business written by FHA would have to perform 30 to 70 percent better than previous business. When examining recent FHA claims data by loan amount, loans over $60,000 seem to be performing only 10 percent to 12 percent better than loans under $60,000. While the frequency of claims is slightly lower, the severity of these losses on larger loans could more than offset the lower claims frequency.

The assertion that raising loan limits would improve its geographic distribution of risk also is unfounded. For example, FHA does serve California homebuyers. The percentage of business FHA insures in California is approximately the same as the percentage of business FHA insures nationwide. Given that the proposed changes would primarily benefit California and some Eastern states, FHA's market penetration would likely increase in those areas, adding more geographic risk to the program, rather than better spreading risk. FDIC Chairman L. William Seidman, recently noted that the residential market in California is of concern because home prices are increasing so rapidly.

FINDING SOLUTIONS TO FHA'S FINANCIAL PROBLEMS

Viable solutions must be found to FHA's financial problem. It must recognize the financial problems and find solutions which balance its social mission with fiscal responsibility.

INCREASE DOWNPAYMENT REQUIREMENTS

One of the primary reasons FHA is losing money is the ever increasing number of very high-ratio loans in its portfolio. According to a study by the National Association of Realtors, the average FHA loan-to-value ratio has been increasing, rising from 85.4 in 1984 to 94.7 in 1988.

It is a fundamental principle of lending that downpayment drives default. This principle was affirmed in a 1989 study by GAO (May 1989–GAO/AFMD 89-26BR) on FHA's financial management. GAO found that claim rates are as much as three to four times greater for loans with a three percent downpayment compared with those made with a 10 percent downpayment. If expanding the availability of these very low-downpayment loans is coupled with very high loan amounts, FHA's losses will continue to grow beyond a level of tolerance.

MICA believes that FHA's downpayment requirements must be increased. The highest loan-to-value ratio should be 97 percent, including closing costs and the mortgage insurance premium. Borrowers should not be permitted to finance their closing costs and their mortgage insurance premium, when it means that the loan-to-value ratio is more than 100 percent. Eliminating the ability of borrowers to finance more than the value of the property is essential to FHA's future financial health.

REVISING THE PREMIUM STRUCTURE

FHA's financial problems are compounded by its inadequate pricing of the risk it insures. FHA charges one premium rate for all loans regardless of the risk factors associated with each loan. While individual private mortgage insurers price differently, generally speaking they vary their premium depending on four risk-related factors—the type of loan instrument, the loan-to-value ratio, the amount of insurance coverage, and whether the property will be owner-occupied. MICA believes that FHA must be given more flexibility in its premium structure. It should charge an actuarially sound premium.

REVISING UNDERWRITING REQUIREMENTS

Presently, FHA does not differentiate its underwriting requirements. The same underwriting requirements apply across the country. This is not the way the private mortgage insurance industry operates. When a private mortgage insurer underwrites a loan, it ensures that the home remains affordable for that borrower far into the future. In order to keep families in their homes, mortgage insurers vary their underwriting requirements based on the risk associated with the loan. Mortgage insurers have identified three key factors which affect mortgage risk—market-related factors, borrower credit-related factors, and lender-related factors. Market-related concerns arise because certain areas of the country represent a greater mortgage insurance risk than others. It is dangerous to originate and insure marginal loans during a local downturn or if there is an oversupply of housing in a market because these typically result in an erosion of equity. Borrower credit factors also are important in managing risk because a mortgage loan must have sufficient credit quality to withstand both economic fluctuations and individual financial reversals. Here such factors as the borrower's debt-to-income ratio or the source of the borrower's income is important.

Finally, lender-related factors are significant in identifying and managing risk. Mortgage insurers are now directing their lender-customers toward high-quality rather than simply high-volume loan origination. Mortgage insurers stress quality control to avoid fraud and to insure an accurate assessment of beginning equity, backed by a valid and professional appraisal.

MICA believes FHA must revamp the way it does business in order to better manage risk. It should adopt regional underwriting requirements. It should be provided with more staff so that it can oversee the quality of lender loan originations and more fully examine the lenders sending business to it. Its management information and accounting systems also should be updated so that the staff has access to more timely information.

TARGET FHA BY INCOME

FHA should be targeted by income. This is the only way to ensure that it helps low- and moderate-income families acquire their own home rather than enable more high-cost houses to be sold with more favorable financing terms.

The rate of homeownership for families earning more than $50,000 has increased in recent years, while the rate of homeownership for people earning less than that has remained stagnant or decreased. A Federal program designed to increase homeownership should be directed to people who are having trouble purchasing a home, not to a class of people where homeownership is increasing.

Raising FHA's loan limits will not help families with less than $50,000 income purchase homes. In fact, only a family earning more than $50,000 can afford to purchase a home at the present FHA loan limit of $124,875 in high cost areas. The only way to direct more Federal homeownership assistance to families in the affordability gap is to target FHA by income.

MICA also believes that targeting FHA by income will not place any unnecessary financial risk on FHA. Data from the mortgage insurance industry shows that defaults increase with very high loan amounts.

CONCLUSION

Major changes must be made for FHA to operate soundly and be self-sustaining in today's mortgage market. Policymakers must decide how best to balance FHA's social purpose of expanding homeownership opportunities for low and moderate-income families with its financial responsibility to American taxpayers. The mortgage insurance industry is an expert in managing risk while helping average working Americans purchase a home. We would be happy to work with Congress and the Administration on resolving FHA's problems.

STATEMENT OF JAMES ETHRIDGE, ON BEHALF OF THE AMERICAN ASSOCIATION OF HOMES FOR THE AGING

ELDERLY HOUSING

Senator MIKULSKI. Mr. Ethridge?

Mr. ETHRIDGE. Good morning. I am James Ethridge and I am an administrator of a federally subsidized elderly housing facility in Baltimore. I am pleased to be here today to represent the views of the American Association of Homes for the Aging, AAHA, and the Maryland Association of Non-Profit Homes for the Aging on the HUD fiscal year 1991 appropriations. We appreciate this opportunity to testify and for your continued support of elderly housing. I will briefly summarize my written statement.

After many years of active involvement in my community, I became the administrator this past year of a church-sponsored facility near downtown Baltimore. This experience has provided me with an opportunity to observe first-hand the benefits of, and the need for, suitable and affordable housing for the elderly. Most of the residents in my facility are minority women in their late seventies who live alone, primarily on their social security check. Our facility provides much of the support that our residents receive daily.

SECTION 202 PROGRAM

In the brief time that I have this morning, I would like to strongly recommend that the committee consider the need to restore much-needed funding for the section 202 program, expand the Congregate Housing Services Program, link supportive services with elderly housing, and improve HUD management.

Ten years ago our Federal Government was funding nearly four times more section 202 housing units than it is today. This funding cut translates into long waiting lists, shortsighted cost containment policies, delays in the HUD pipeline, and the squeezing out of nearly 1 million low-income older persons who are no longer eligible for Federal assistance.

A few weeks ago, the fiscal year 1990 funding for section 202 was announced with only 5,600 units for the elderly. This is less than 13 units per congressional district. It is no wonder that nationwide there are over 250,000 older persons on waiting lists for section 202's. The national vacancy rate for section 202 is less than 1 percent. The waiting list in my facility is 2 years.

NEW CONSTRUCTION

The fiscal year 1991 budget requests $282 million to support new construction of only 3,097 units of elderly housing and 870 units of handicapped housing. This represents a cut of over 40 percent from the current level. The administration also requests a proposed 5-year leased housing program.

The voters supported policy to restore Federal housing for elderly housing. Last month, AAHA commissioned a national poll that revealed that 89 percent of the respondents believe that there is a critical need for elderly housing and that 73 percent believe that the Federal Government has a role in funding housing development.

In closing, AAHA feels strongly that the current demographic trends, combined with years of housing funding cuts, necessitate the restoration of funding for the section 202 program and the establishment of supportive elderly housing.

AAHA and our memberships of nonprofit sponsors welcome the opportunity to work with you and your committee in addressing this great need.

Thank you.

[The statement follows:]

STATEMENT OF JAMES ETHRIDGE

My name is James Ethridge. I am an administrator of a federally subsidized elderly housing facility in Baltimore. I am pleased to be here today to represent the views of the American Association of Homes for the Aging (AAHA)* And the maryland Association of Non-Profit Homes for the Aging (MANPHA)** on the HUD FY91 Appropriations. We appreciate this opportunity to testify before this subcommittee, and would also like to express our appreciation for your continued support of elderly housing.

After many years of active involvement in my community and church, I became the administrator this past year of N.M. Carroll Manor, a church sponsored facility near downtown Baltimore. This experience has provided me with an opportunity to experience first hand the benefits of and need for suitable and affordable housing for the elderly. Most of the residents in my facility are minority women, in their late 70s, who live alone primarily on their social security check. Our facility provides much of the support that our residents receive daily.

In the brief time that I have this morning, I would like to strongly recommend that this committee consider the need to restore much needed funding for senior housing, particularly the Section 202 program. It is difficult for me to understand why it is that ten years ago our federal government was funding nearly four times more Section 202 housing units than it is today. Certainly it is not due to reduced need as the elderly comprise the fastest gropwing segment of the population. This funding cut has translated into long waiting lists, short sighted "cost containment" policies, delays in the development pipeline, and the unfortunate squeezing out of nearly a million low-income older persons who are no longer eligible for federal assistance due to tight targeting requirements.

A few weeks ago, the FY90 funding for Section 202 elderly housing was announced with only 5,600 units for the elderly (2,274 for the handicapped). that is less than 13 units per congressional district. The State of Maryland will have to compete with D.C. and the other four states in federal region III for only 554 units.

Is it any wonder that there are nationwide, over 270,000 older persons on waiting lists for Section 202s. The house aging committee released a study last year that indicated that there are eleven older persons on waiting lists for each annually vacated Section 202 unit. The national vacancy rate for Section 202 is less than 1%. In Maryland, the number of people on waiting lists represent 2/3 of the number of current residents in facilities. The waiting list in my facility is two years. Where will these low income older people find suitable and affordable housing?

The FY91 budget requests $282.5 million to support new construction of only 3,097 units of elderly housing and 870 units of handicapped housing. This represents a cut of over 40 percent from the current level. The administration also requests 3,000 units for a proposed Section 202 5-year leased housing program, including 1,300 units for the nonelderly handicapped.

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* the American Association of Homes for the Aging is a national association representing over 3,400 nonprofit providers of housing, long term health care, and community services. AAHA member facilities are organized within 38 affiliated state associations. Seventy-five percent of aaha facilities are affiliated with religious organizations, while the remaining are sponsored by community groups, fraternal organizations, labor unions, government agencies, and private foundations.

** Maryland Association of Non-Profit Homes for the aging headquartered in Columbia, Maryland represents 69 not-for-profit nursing homes, retirement communities and housing for the elderly serving over 11,000 elderly throughout the state of Maryland.

In light of the substantial funding cuts over the last ten years and the growing need, AAHA firmly believes that further cuts are intolerable and counterproductive to our nation's need for suitable and affordable elderly housing. We are urging you to restore the level of funding for the Section 202 program to that of a decade ago, 20,000 units.

Would the voters support a policy to restore federal funding? Last month, AAHA conducted a national poll of the general population on elderly housing issues that revealed that 89 percent of respondents believe that there is a critical need for elderly housing; and that 73 percent believe that the federal government has a role in funding elderly housing development.

Because of distinct housing and supportive services needs, AAHA supports the need for specific supportive housing for handicapped persons. We would recommend in the handicapped program that sponsors be provided with options for construction, acquisition, or leasing, and that language be included with the bill to clarify program distinctions, and age-distinct senior housing.

Pipeline - AAHA supports the administration's efforts to accelerate the development of Section 202 projects stalled in the pipeline. As you know, the FY90 HUD Appropriation provided $180 million for pipeline amendments. This year, the administration is seeking to shift an additional $55 million of FY90 Section 202 funding and $100 million of FY 90 Section 8 funding to amend contracts for projects in the pipeline. If congress approves, this would result in a loss of 679 units from the FY90 funding level (8,500 units). For FY91, the administration proposes an additional $75 million for pipeline amendments. AAHA supported the action last year to ensure adequate funding of the Section 8 amendments for this purpose. However, we believe that any additional funds needed for contract amendments should be provided through direct appropriations, and not through transfers from current year funding for critically needed new construction.

Congregate Housing Services Program - CHSP was enacted as a means of demonstrating a cost effective model for linking supportive services with federal assisted housing to prevent premature or unnecessary institutionalization of frail elderly and handicapped persons. Currently, the program benefits 2,000 older persons in 60 projects; half Section 202 projects, and half public housing. The cost effectiveness of the CHSP program in addressing the supportive housing needs of frail elderly has been documented by the University of Illinois and others to save approximately $5,000 per person per year for CHSP compared to institutionalization costs. Last year, an Urban Institute study indicated that there are over 365,000 older persons in federally assisted housing with some level of frailty requiring supportive services. AAHA and NANPHA conducted surveys of our housing members who overwhelmingly indicated that "aging in place" of residents is their number one concern. Yet the administration is seeking no new funding for CHSP.

The administration recognizes the need to link supportive services with housing in their HOPE proposal. However, their recommended 5-year demonstration of service enriched vouchers does not respond to the current need of residents aging in place in existing federally assisted housing. We strongly recommend that this HOPE demonstration program, if funded, should be developed as a compliment, not a substitute, for the CHSP and other supportive housing options.

AAHA supports appropriations for CHSP at $25 million in order to expand the number of projects able to participate in the program. We would also urge that the committee provide sufficient funding in fy91 to accommodate proposed legislative changes authorized by s.566, the national affordable housing act, which was reported by the senate banking committee last week.

Modernization/Retrofitting/Flexible Subsidy - AAHA supports direct appropriations for a modernization program that targets nonprofit sponsored elderly housing, including Section 202 and nonprofit sponsored Section 236 elderly housing, at a minimum level of $75 million annually. AAHA would also request legislative changes to allow nonprofit sponsored Section 236 projects to transfer their excess rents (rents paid in excess of "base rent") into their reserve for replacement or residual receipts account to fund needed modernization.

Management - Finally, we would recommend that increased funding be provided to hud for increased manpower, training, technical assistance and other related activities to improve the efficiency and management of federally assisted elderly housing. These resources are particularly critical for developing effective supportive housing programs in federal assisted elderly housing. AAHA supports a relaxation of present targeting restrictions for the Section 202 program to allow affordable housing for low and moderate income older persons (to restore the former eligibility of 80% of area median income).

In closing, AAHA feels strongly that current demographic trends necessitate the restoration of funding for the Section 202 program, and the establishment of supportive elderly housing to respond to aging in place need of older residents in federal assisted housing. The Section 202 program has been one of our country's most successful housing programs. It has been proven to be cost efficient and have sound management. As community based nonprofit sponsors of Section 202, our bottom line is the quality of life for our residents. There is a great need to restore funding for this program.

AAHA and our national membership of nonprofit sponsors of elderly housing, stands ready to work with you and the committee to bring about adequate federal funding and needed reforms of elderly housing programs. Thank you for this opportunity to share our views.

Senator MIKULSKI. Thank you very much, Mr. Ethridge, and your testimony is well taken.

Ms. Carosella, we knew that the Mortgage Insurance Co. of America had a differing view when last year the Congress raised the FHA limits; we welcome your testimony and, again, any other additional documentation as we work our way through this.

We pressed Mr. Kemp rather rigorously on where they were heading with FHA. We're looking forward to the Price Waterhouse report, because the reform necessary for FHA is beyond the scope of an appropriations committee. But we look forward to working with the authorizers, the mortgage banking community, homeowners, realtors and so on, because of the very serious, very serious situation that FHA is facing and our community is facing in terms of access to homeownership. So we look forward to further conversations.

I'm going to once again ask as part of this panel, is Mr. Joe Laban of the Southwest Indian Authority here?

[No response.]

Senator MIKULSKI. Clara Green?

[No response.]

Senator MIKULSKI. Dave Harrison?

[No response.]

Senator MIKULSKI. Ralph Goff of the Campo Bank of Mission Indians?

[No response.]

Senator MIKULSKI. Wesley Martel, Shoshone Tribes?

[No response.]

Senator **Mikulski**. Well we're going to conclude this part of the testimony, we're going to recess for a few seconds while I get a picture with the hometown team—you can have one too, Ms. Carosella——

Ms. **Carosella**. OK.

Senator **Mikulski** [continuing]. But Mr. Ethridge, and then we'll move on to our next panel.

[A brief recess was taken.]

Senator **Mikulski**. We're going to continue our testimony and would you be kind enough to identify yourselves for the Chair, starting with you so we know what your names are.

Ms. **Peterson**. My name is Joan Peterson.

Senator **Mikulski**. And who are you representing, Ms. Peterson?

Ms. **Peterson**. I'm representing the Consortium for Citizens with Disabilities.

Senator **Mikulski**. I see. OK.

Mr. **Everett**. I'm John Everett and I'm here for Dee Everett.

Senator **Mikulski**. OK.

What organization?

Mr. **Everett**. I'm sorry, the Association for Retarded Citizens of the United States.

Senator **Mikulski**. OK.

Yes, Ma'am?

Ms. **Bedford**. I'm Gwen Bedford, I'm representing Marty Corey and I'm representing AARP, American Association of Retired Persons.

Senator **Mikulski**. Thank you.

Mr. **Van Ningen**. David Van Ningen, representing the National Association of Private Residential Resources.

Senator **Mikulski**. Thank you.

Ms. Morris, I know you represent the National Association of Housing and Redevelopment Officials.

Ms. Peterson.

STATEMENT OF JOAN PETERSON, ON BEHALF OF THE CONSORTIUM FOR CITIZENS WITH DISABILITIES

HOUSING BILL

Ms. **Peterson**. Thank you.

I am director of St. Luke's House, Inc., and that is a psychiatric rehabilitation program serving people with mental illness in Montgomery County, MD. As a representative of the Housing Task Force of the Consortium for Citizens with Disabilities, I am here today to address the housing bill.

The Consortium for Citizens with Disabilities is a coalition comprised of over 65 consumer, advocacy, provider, and professional organizations working on behalf of more than 43 million people with disabilities.

All Americans share the risk of becoming disabled. Some people are born with a disability, others develop a disability due to environmental factors, accident, illness, or injury. Others yet develop age-related disabilities. Persons with disabilities make up one of the largest minority populations in the Nation, but, unlike other minority groups, people with disabilities are not always set apart by demographic categories. However, while disability may transcend age, sex, race, and national origin, more often than not persons with disabilities are persons who fall in the low to very-low-income range.

DISABLED NEED APPROPRIATE AND ADEQUATE HOUSING

Like all citizens of this nation, individuals with disabilities have the need for appropriate and adequate housing. However, because of their income status, individuals with disabilities particularly rely on assisted housing programs that are sponsored through the Department of Housing and Urban Development. At the present time and for at least the past decade, the lack of available affordable housing has continued to be a major problem for persons with disabilities. Therefore, the continuation and expansion and the development of new assisted housing programs that ensure prompt construction and acquisition and rehabilitation, rental subsidies, and the opportunity for persons with physical and mental disabilities to choose among a variety of community-based housing options are all of major concern to CCD.

SECTION 202 PROGRAM

I'm going to stress the recommendation on the section 202 program, due to the time limitation. We do have other recommendations for other programs.

Regarding section 202, we recommend that it receive an appropriation of $650 million for fiscal year 1991. We also recommend that funds available for new construction be increased and that any leased units proposals be operated as a demonstration for all persons with disabilities eligible for the 202 program.

CCD recognizes the need for additional housing units for persons who are homeless; however, the CCD supports providing units for the shelter plus care program with new funds and not at the expense of the section 202 program.

Senator **MIKULSKI**. Thank you very much for that testimony, Ms. Peterson. I know you could go into it in a great deal of detail and, again to all of the witnesses, amplification documents will be accepted for the record.

[The statement follows:]

STATEMENT OF JOAN PETERSON

The Consortium for Citizens with Disabilities respectfully submits the following recommendations for fiscal year 1991 appropriation levels for the Department of Housing and Urban Development (HUD). CCD recommendations focus on HUD initiatives that assist individuals with disabilities to live successfully in the community. The CCD recommendations are as follows.

o The CCD recommends that the Section 202 Program receive an appropriation of $650 million for FY 1991, CCD also recommends that funds available for new construction be increased and that any leased units proposal be operated as a demonstration for all persons with disabilities eligible for the Section 202 program. The CCD recognizes the need for additional housing for persons who are homeless. However, the CCD supports providing units for the "Shelter Plus Care" program with new funds and not at the expense of the Section 202 program.

o The CCD recommends $10 million for the Congregate Housing Services Program in FY 1991.

o The CCD supports the Administration's recommendation of $143.4 million for the entire Supportive Housing Demonstration Program for FY 1991. However, we also recommend that at least $30 million be targeted to the "Permanent Housing for Handicapped Homeless" Program.

o The CCD recommends $3 billion for the Community Development Block Grant Program in FY 1991.

o The CCD recommends that Congress appropriate $247 million in new funds to expand housing supports to persons who are homeless. Funding for the Shelter Plus Care program must not be obtained at the expense of other programs to help people with disabilities, individuals who are elderly, or those who are homeless.

o The CCD recommends $20 million for HUD's implementation of the Fair Housing Amendments Act of 1988.

INTRODUCTION

The Consortium for Citizens with Disabilities (CCD) is a coalition comprised of over 65 consumer, advocacy, provider, and professional organizations working on behalf of the more that 43 million Americans with physical and/or mental disabilities. Each year the Housing Task Force of the CCD submits appropriations testimony on programs that affect the lives of persons with disabilities. The following testimony is related to fiscal year 1991 appropriations for the Department of Housing and Urban Development.

All Americans share the risk of becoming disabled. Some people are born with a disability, others develop a disability due to environmental factors, accident, illness, or injury. Others, yet, develop age-related disabilities. Persons with disabilities make up one of the largest minority populations in the nation but, unlike other minority groups, persons with disabilities are not always set apart by demographic categories. However, while disability may transcend age, sex, race, and national origin, more often than not, persons with disabilities are persons who fall into the low to very-low income range.

Like all citizens of this nation, individuals with disabilities have the need for appropriate and adequate housing. However, because of their income status, individuals with disabilities particularly rely on assisted housing programs that are sponsored through the Department of Housing and Urban Development. At the present time, and for at least the past decade, the lack of available affordable housing has continued to be a major problem for persons with disabilities. Therefore, the continuation and expansion, and the development of new assisted housing programs that ensure prompt new construction, acquisition and rehabilitation, rental subsidies, and the opportunity for persons with physical and mental disabilities to choose among a variety of community-based housing options are all of major concern to the CCD.

CCD RECOMMENDATIONS

The decade-long, historical decline in the availability of housing for individuals with low incomes, coupled with an increase in the number of individuals who are, or may become, homeless, and the need to provide affordable housing to our most at-risk citizens demands continued and expanded federal support. Therefore, the Housing Task Force of the CCD recommends the following funding levels for specific assisted housing programs and for the effective implementation and enforcement of the Fair Housing Amendments Act of 1988.

SECTION 202 DIRECT LOAN PROGRAM: The Section 202 Direct Loan program provides loans to non-profit organizations to construct or rehabilitate and manage housing for low-income persons who are elderly or have disabilities. The Section 202 program is especially important because it is the only capital financing mechanism within HUD specifically designated for housing development for people with disabilities, and it is administered in tandem with matched rental subsidies. The continued marked decrease in new loan authority for the Section 202 program has resulted in more than 60 percent fewer new units funded annually. An additional program change, as suggested in the Administration's budget proposal, would be another obstacle to the development of affordable housing for persons with disabilities. The supply of new housing stock would once again be diminished leading to intense competition within an ever shrinking pool. Waiting lists exist nationwide for community housing options. Sponsors of housing for persons with disabilities have been seeking additional flexibility in this program in order to be able to acquire and/or develop housing in multi-family housing, condominium, or cooperative communities. Additional flexibility has also been sought in relation to the actual cost of developing housing under this program.

CCD RECOMMENDATION: The CCD recommends that the Section 202 Program receive an appropriation of $650 million for FY 1991. CCD also recommends that funds available for new construction be increased and that any leased units proposal be operated as a demonstration for all persons with disabilities eligible for the Section 202 program.

CONGREGATE HOUSING SERVICES: The Congregate Housing Services Program is designed to encourage and assist persons who are elderly or who have disabilities and are residents of HUD Section 202 and public housing units to maintain independence within their homes by providing funds for essential supportive services. One-third of those served in recent years have been people with disabilities. Once again, the Administration budget recommends no additional funding for this program in FY 1991 and proposes a demonstration of service-supported housing vouchers for frail elderly persons. This recommendation does nothing to continue to provide services to the large number of persons in already established residential settings and makes no mention of services for persons with disabilities. A major focus of the disability community has long been the development of community-based programs and services. However, at the same time, there have been substantial reductions in available federal funds for these programs and a lack of available state programs.

CCD RECOMMENDATION: The CCD recommends $10 million for Congregate Housing Services in FY 1991.

SUPPORTIVE HOUSING DEMONSTRATION PROGRAM: The Supportive Housing Demonstration Program funds both transitional and permanent housing for homeless persons with disabilities. The transitional housing program is intended to help homeless individuals, including those with mental disabilities, to move into independent living settings by providing temporary housing and supportive services. The permanent housing program for homeless individuals with disabilities provides funding to states for permanent, community-based housing specifically geared to persons with disabilities who have moved from transitional housing and/or are homeless or at risk of becoming homeless. The permanent housing program provides a much needed long-term approach toward combatting homelessness and deserves a substantial increase in funds specifically targeted for this program. The President's FY 1991 budget request proposes an appropriation of $143.4 million for the entire Supportive Housing Demonstration program.

The CCD supports the Administration's recommendation of $143.4 million for the Supportive Housing Demonstration Program in FY 1991. However, we also recommend that at least $30 million be targeted to the "Permanent Housing for Handicapped Homeless" Program.

COMMUNITY DEVELOPMENT BLOCK GRANT: The primary objective of the Community Development Block Grant program is the development of viable communities by the expansion of economic opportunities, principally for persons with low and moderate incomes. Specific activities under CDBG that assist individuals with disabilities include the acquisition or rehabilitation of buildings used for group living arrangements and other community-based services, and shelters for persons who are homeless. CDBG is also one of the few funding sources available to assist persons with disabilities to make accessibility modifications to their homes. This capability effectively increases the availability of accessible housing. This program needs to continue to expand if community housing and program options are going to continue to increase. For FY 1991, the Administration proposes a $2.7 billion funding level for the CDBG program. With this decrease in funding could come a decrease in the availability of housing and other community-based services developed for those who truly need them which could lead to an increase in homelessness and institutionalization among persons with disabilities.

CCD RECOMMENDATION: The CCD recommends $3 billion for the Community Development Block Grant Program in FY 1991.

SHELTER PLUS CARE FOR PEOPLE WHO ARE HOMELESS: The Administration has requested $247 million for a "new" program of housing assistance to people with mental illness, or recovering substance abusers who are homeless by redirecting funds from existing programs. The proposed "Shelter Plus Care Program" would include: $161 million and 6,600 units in a new Rental Housing Assistance program; $50 million from the McKinney Act Section 8 Moderate Rehabilitation (Single Room Occupancy) program to provide 1,305 units; and $36 million from the existing Section 202 program to provide 1,000 units. Because the Shelter Plus Care initiative is derived by redirecting and reducing other programs designed to assist low income persons who have disabilities, are elderly, and/or are homeless, it has the potential to add to, rather than reduce, the homeless population. The source of funding primarily impacted is the critical Section 202 program.

CCD RECOMMENDATION: The CCD recommends that Congress appropriate $247 million in new funds to expand housing supports to persons who are homeless. Funding for the Shelter Plus Care program must not be obtained at the expense of other programs to help people with disabilities, individuals who are elderly, or those who are homeless.

FAIR HOUSING AMENDMENTS ACT OF 1988: In 1988, Congress amended the Fair Housing Act to prohibit discrimination against individuals with disabilities and families with children, as well as to considerably broaden the government's enforcement powers. The newly amended law requires private and public housing providers to accommodate the needs of people with disabilities by, for example, modifying housing policies and practices that result in discrimination; and designing new multifamily housing that is structurally adaptable. The Administration's budget requests $12.2 million for all of HUD's fair housing enforcement activities and for the Department's funding of state, local, and private enforcement activities. Not only is this an insufficient sum to enforce the law, it represents a $200,000 reduction from the 1990 appropriation.

CCD RECOMMENDATION: The CCD recommends $20 million for HUD's implementation of the Fair Housing Amendments Act of 1988.

SUMMARY

Madam Chairman, the CCD Housing Task Force is very pleased to have had the opportunity to share our views and recommendations with the Members of the Committee. We want to thank you for your time and let you know that we are eager to work actively with you in this area. For more information contact the co-chairperson of the CCD Housing Task Force whose name and number is listed on the cover sheet.

STATEMENT OF JOHN EVERETT, EXECUTIVE DIRECTOR, ASSOCIATION FOR RETARDED CITIZENS OF THE UNITED STATES

Senator **Mikulski**. Mr. Everett, we look forward to your testimony in terms of the Association for Retired Citizens.

Mr. **Everitt**. Madam Chair, thank you.

My name is John Everett. I am executive director of the Association for Retarded Citizens of Howard County, MD, just up the road, and I'm here this morning to testify on behalf of the national association.

HUD 202 PROJECT

The Association for Retarded Citizens in Howard County operates, or is involved in, a consortium that is putting together, or has been awarded, a HUD 202 project for 7 sites serving 28 individuals and the association does run a number of community-based programs serving approximately 73 people.

I would just like to highlight some of the other recommendations of the ARC–US:

RECOMMENDATIONS

For section 202 we recommend that the loan authority for the program be maintained at least at the level that was included in the Housing and Community Development Act of 1987 for fiscal year 1989, or $650 million.

For the Congregate Housing Services Program, we recommend an appropriation level of $10 million.

For the Supportive Housing Demonstration Program, we recommend an appropriation level of $143 million, with $30 million specifically earmarked for the Permanent Housing Program. There is a lot of concern that individuals be helped on permanent housing, just not temporary housing.

For the Community Development Block Grant Program, the ARC recommends the continuation of the current level of appropriation in fiscal year 1991.

And the ARC recommends an increase in appropriation level of $20 million for the Fair Housing Initiatives Program. Right now, the administration has recommended a $200,000 reduction from that and there is concern that they won't be able to enforce the fair housing amendments if that is not restored.

And finally the ARC recommends that an adequate portion of HUD's research and technology funds be targeted for lead abatement and lead poisoning prevention programs.

I thank you for this opportunity to testify before you.

CONSORTIUM OF SMALLER HOUSING UNITS

Senator **Mikulski**. Mr. Everett, the programs you operate in Howard County, it's not like it's a single facility, it is a consortium of smaller housing units——

Mr. **Everett**. Right. We operate 23 houses scattered throughout the community, throughout Columbia, throughout Howard County, Jessup, Ellicott City——

Senator **Mikulski**. Then that's the way the consortium is organized, is that right?

Mr. **Everett**. Right. The houses—the consortium that is involved in the 202 project actually is developing these small scattered sites for the agencies in Howard County.

Senator **Mikulski**. Have you found that to be the most effective way to deliver housing services for the retarded—organized in essentially traditional residential housing?

Mr. **Everett**. Right. Yes; we have. And not only that, I think it fosters the values that we believe in, and that is, it gives people the opportunity to be independent and integrated rather than, you know, segregated and congregated in large sites.

Most of the 202 sites that we operate only have three people in them, with a house counselor, and most of them are town homes or very small single-family homes. And I think it works very, very well. And we have, in Howard County, at least tried to scatter those among the community so there's not a lot of community opposition.

Senator **Mikulski**. Thank you.

[The statement follows:]

STATEMENT OF JOHN EVERETT

The Association for Retarded Citizens of the United States (ARC) respectfully submits the following recommendations for fiscal year 1991 appropriation levels for the Department of Housing and Urban Development (HUD). ARC recommendations focus on HUD initiatives that assist individuals with mental retardation and other disabilities to live successfully in the community. The ARC recommends:

o The loan authority for the Section 202 Direct Loan Program be maintained at least at the level included in the Housing and Community Development Act of 1987 for FY 1989, $650 million dollars. We also recommend that the program be modified to permit its use in multi-family housing, condominium, and cooperative communities. We recognize the need for additional housing for persons who are homeless, however, we strongly recommend, that any new programs in this area, such as the Shelter Plus Care Program, if funded, be funded with new funds and not at the expense of other existing programs, such as Section 202.

o An appropriation level of $10 million for the Congregate Housing Services Program. We also recommend that, while a program of services for persons who are elderly and frail and "aging in place" is an idea with merit, it should not be established with funds taken from another critical program already serving many individuals who are elderly or have disabilities.

o An appropriation level of $143.4 million For the Supportive Housing Demonstration Program with $30 million in these funds specifically earmarked for the Permanent Housing Program for Handicapped Homeless to help ensure the availability of needed permanent housing for persons with disabilities moving from transitional settings.

o Continuation of the current appropriation level of $3 billion for the Community Development Block Grant Program in fiscal year 1991.

o An increased appropriation level of $20 million for the Fair Housing Initiatives Program. The Administration has requested $12.2 million for all of HUD's Fair Housing enforcement activities and for the funding of state, local, and private enforcement activities. This is an insufficient sum to enforce the law, and also represents a $200,000 reduction from the FY 1990 appropriation.

o Finally, that an adequate portion of HUD's Research and Technology funds be targeted for lead abatement and lead poisoning prevention programs, and that all lead abatement programs include housing for persons who have disabilities.

INTRODUCTION

Madam Chairman, Committee Members....My name is John Everett. I am Executive Director of the Association for Retarded Citizens of Howard County, Maryland. The Howard County ARC is actively involved in the provision of community-based housing options for persons with mental retardation. This year the Association for Retarded Citizens of the United States marks its 40th year of nationwide service to persons with mental retardation. The ARC counts among its more than 160,000 members, parents, professionals, and self-advocates across the nation who are part of, or work on behalf of, the over six million citizens with mental retardation.

For over a decade, a priority ARC concern has been, and continues to be, the availability of community-based services, including residential options, for persons with mental retardation. Concomitant with this concern is the deinstitutionalization of persons with mental retardation residing in large, and most frequently, inadequate and inappropriate residential settings which many have been forced to call home. It is also an ARC concern that persons with mental retardation, who reside in the community, have the opportunity to experience the same life span transitions as others. These transitions include those related to the choice of where and with whom to live. Our success in these efforts and the success of the 1,300 state and local ARC affiliates are dependent upon both the availability of affordable, community-based housing, and access to the means to develop and/or acquire such housing. As a result, the individuals whom we represent, and those who provide services for them, often depend on programs of the Department of Housing and Urban Development to spur the development and/or acquisition of, and ensure access to, a variety of community-based housing options.

HOUSING AVAILABILITY

Independence, integration, and productivity are both values and goals of the disability community. Public policy that is going to affect the lives of persons with mental retardation and other disabilities must reflect these values and be designed to achieve these goals. Individuals with mental retardation and other disabilities are people first and as people they reflect the same heterogeneous mixture of desires and needs as the population taken as a whole. This wide variety of desires and needs is as true in the area of housing as in all other areas of life.

o The Section 202 Direct Loan Program is the federal program that has most visibly contributed to expanding community-based housing for persons with mental retardation and other developmental disabilities. This program is especially important because it is the only capital financing mechanism within HUD specifically designated to develop housing for persons with disabilities. The number of available units has ranged from 30,000 total units in 1976 to approximately 7,900 total units for which funds are available for fiscal year 1990 (Federal Register, April 13, 1990). The Administration's FY 1991 budget request continues this downturn and proposes modifications to the Section 202 program which have the potential to completely decimate its effectiveness in providing housing for both persons with disabilities and persons who are elderly.

According to data from a 1987 waiting list survey carried out by the ARC, more than 60,000 persons with mental retardation were then waiting for community-based residential services. This number continues to grow and does not reflect the waiting lists for persons with other mental or physical disabilities. Many sponsors of Section 202 housing for persons with disabilities have been seeking flexibility. This is, in part, the flexibility to acquire or develop housing in more integrated settings. A major goal of the disability community has been to modify the requirements of the Section 202 Program so that funds can be used to develop housing in multi-family housing, condominium, or cooperative communities. Free standing group homes and independent living centers remain necessary for many individuals with disabilities because of the depth of supportive services needed, but for others with less strong service requirements the opportunity to live as part of the larger community as a whole is highly beneficial. Also in many geographic locations, the limited availability of open land or high land costs demands the development of condominium and townhouse communities.

There are many other ways in which HUD initiatives are assisting persons with disabilities living in the community. The Community Development Block Grant Program has been helping organizations to acquire and rehabilitate buildings used for group living arrangements and other community-based services, shelters for persons who are homeless, and programs for home remodeling for accessibility. CDBG funds have provided localities with the necessary discretion to fund appropriate services based on specific local needs. The Congregate Housing Services Program has also been a unique initiative to ensure that those living in HUD-funded housing in the community will have the support services, such as meals, transportation, personal care, and housekeeping assistance, that are necessary for them to continue to live in the community and avoid institutionalization. One-third of those served by the program in recent years have been persons with disabilities. The Permanent Housing for Handicapped Homeless Persons, part of the McKinney Supportive Housing Demonstration Program, provides needed permanent, community-based housing for persons with disabilities, who have moved from transitional housing and/or are homeless or at risk of becoming homeless.

In passing the Fair Housing Amendments Act of 1988, Congress prohibited discrimination against individuals with disabilities and families with children, and broadened the government's enforcement powers. This law has the potential to greatly expand the availability and accessibility of housing for persons with mental retardation and other disabilities if well developed outreach and education programs are undertaken, and if strong and consistent enforcement is a major priority. In 1971, the Congress reflected its concern with the dangers of lead by the passage of the Lead Poisoning Prevention Act. Unfortunately, the implementation of this law has been haphazard and, to this day, unsuccessful in reducing this recognized, and preventable, cause of disability in individuals exposed to even lower levels of lead than was previously believed. It is essential that effective, safe lead abatement programs be carried out without further delay in all types of housing provided or supported by HUD, including housing for persons who have disabilities.

ARC RECOMMENDATIONS

At the present time, and for at least the past decade, the lack of available affordable housing continues to be a major problem for persons with disabilities. The continuance and expansion of assisted housing programs, which ensure prompt new construction, acquisition and rehabilitation, rental subsidies, and the opportunity for persons with mental retardation to choose among a variety of community-based housing options are all major concerns to our constituents. Therefore, the ARC recommends the following funding levels for specific assisted housing programs, for the effective implementation and enforcement of the Fair Housing Amendments Act of 1988, and for effective implementation of HUD sponsored lead abatement and lead poisoning prevention programs.

- For Section 202, we recommend that the loan authority for the program be maintained at least at the level that was included in the Housing and Community Development Act of 1987 for FY 1989, $650 million dollars. We also recommend that the Section 202 Program be modified to permit its use in multi-family housing, condominium, and cooperative communities.
- For the Congregate Housing Services Program, the ARC recommends an appropriation level of $10 million.
- For the Supportive Housing Demonstration Program, the ARC recommends an appropriation level of $143.4 million with $30 million in these funds specifically earmarked for the Permanent Housing Program for Handicapped Homeless. This type of earmarking would help ensure the availability of needed permanent housing for persons with disabilities moving from transitional settings.
- For the Community Development Block Grant Program, the ARC recommends continuation of the current level of appropriation, $3 billion.
- The ARC recommends an increased appropriation level of $20 million for the Fair Housing Initiatives Program.
- Finally, the ARC recommends that an adequate portion of HUD's Research and Technology funds be targeted for lead abatement and lead poisoning prevention programs. We also recommend that all lead abatement programs include housing for persons who have disabilities.

SUMMARY

Madam Chairman, the ARC is pleased to have had the opportunity to share our views and recommendations on these critical programs with the Committee. We want to thank you and the Committee for the continuing interest you have shown for the housing needs of persons with mental retardation and other disabilities. The ARC is eager and prepared to work with you. Our goal, as yours, is an appropriations bill that is responsive to the individual housing needs of all citizens, including persons with mental retardation and other disabilities. Again, thank you for allowing us to appear before you today. For more information, contact Dr. Kathleen McGinley, Association for Retarded Citizens of the United States Governmental Affairs Office, (785-3389).

STATEMENT OF GWEN BEDFORD, ON BEHALF OF THE AMERICAN ASSOCIATION OF RETIRED PERSONS

Senator **Mikulski**. Thank you.

Now let's turn to Ms. Gwen Bedford representing the very dynamic AARP.

Ms. **Bedford**. Thank you, Madam Chair.

AARP appreciates this opportunity to testify on HUD's fiscal year 1991 budget request. Before doing so, however, I would like to thank you, Madam Chair, and the rest of the subcommittee for actions taken last year to prod HUD into clearing the pipeline of projects funded under section 202. We urge the subcommittee's continued vigilance in making sure that all viable projects go to closing in the near future.

AARP believes the fiscal year 1991 HUD appropriation bill should bring to an end the steady erosion of our Federal housing commitment and initiate prudent investments to help meet our Nation's current and future housing needs.

LEASED HOUSING

The association has serious misgivings about the administration's proposal to restructure the section 202 program by redirecting a substantial portion of its resources to leased housing. The short-term commitment to housing under the lease approach is not consistent with the long-term commitment required to meet the projected need.

Ultimately the association would like to see section 202 funded at a level sufficient to produce 20,000 units per year, as it did in the late 1970's. Recognizing, however, that the subcommittee faces tight spending limits for fiscal year 1991, we ask that you restore some of the cuts sustained by the program over the past several years. A modest increase in the program would send a signal of the subcommittee's continuing commitment to section 202.

CONGREGATE HOUSING SERVICES PROGRAM

For the Congregate Housing Services Program, the association recommends an appropriation of $10 million for the next year. Experts in housing agree that the program is very effective in preventing unnecessary institutionalization among older and disabled residents of public and section 202 housing.

Despite this success, the administration has proposed no funds in fiscal 1991. AARP opposes such a shortsighted approach that ignores the challenge faced by housing managers in providing for the needs of older tenants who are aging in place.

My full testimony also contains recommendations on housing preservation, public housing, technical assistance to nonprofits, and housing counseling. Time does not allow full discussion of those proposals, but we ask for your sympathetic consideration.

Thank you again for the opportunity to testify before you today and for your continued leadership on these issues.

Senator **Mikulski**. Thank you, Ms. Bedford.

Could I ask you what all your badges are?

Ms. **Bedford**. Well, part of——

Senator **Mikulski**. You've got more brass on you today than a retired general.

Ms. **Bedford**. Right. Well essentially——

Senator **Mikulski**. And I bet you've taken more beachheads in your time, too.

Ms. **Bedford**. Madam Chair, they're my AARP and some of the organizations I belong to, but I think the real reason for wearing them is the beautiful Zuni jewelry I have from the Zuni Pueblo in New Mexico.

Senator **Mikulski**. Well, they're great. And each one represents a chapter or an accomplishment or a committee that you've chaired?

Ms. **Bedford**. One of the organizations that I'm active with; yes.

Senator **Mikulski**. Well, that's excellent.

We thank you for your testimony.

[The statement follows:]

Statement of Gwen Bedford

Madam Chair and members of the Subcommittee: I am Gwen Bedford, member of the National Board of Directors of the American Association of Retired Persons (AARP). AARP appreciates this opportunity to testify on appropriations for programs under this Subcommittee's jurisdiction. Our recommendations for specific programs can be summarized as follows:

One, provide sufficient loan authority and Section 8 rent subsidies to reverse the steady decline in Section 202 production levels;

Two, provide the authorized $10 million for the Congregate Housing Services Program (CHSP), which would extend services at the 60 current project sites through fiscal year 1991 and add the first new sites since 1983;

Three, increase operating subsidies and modernization funds for public housing authorities to maintain adequate services for all tenants;

Four, preserve prepayment-eligible, low-income housing by funding Section 8 project-based subsidies; maintaining flexible subsidies, and providing assistance to nonprofits and tenant associations to purchase these projects;

Five, increase funding for the Section 106 technical assistance program to support the expanded missions for nonprofits in the production and preservation of low-income housing;

Six, increase funding for the housing counseling program to meet additional responsibilities for counseling home equity conversion consumers; and

Seven, continue report language with regard to the Environmental Protection Agency (EPA), calling for greater use of Senior Environmental Employment (SEE) enrollees in EPA activities.

Serious problems of housing affordability and suitability affect many older people, especially those over 75 years of age and women living alone. Female renters over 65 living alone pay, on average, 37 percent of their incomes for rent—a percentage that increases with advancing age. Older minorities continue to bear a heavier burden than their white counterparts. For example, older black women living alone pay, on average, more than 50 percent of their incomes on rent. AARP believes the fiscal year 1991 HUD Appropriation bill should bring to an end the steady erosion of our federal housing commitment and initiate prudent investments to help meet our nation's current and future housing needs. I would like to discuss AARP's recommendations for the Subcommittee's consideration.

SECTION 202

First, I would like to thank you, Madam Chair, and the rest of the Subcommittee for actions you took last year to prod HUD into clearing the pipeline of projects funded under Section 202. We also commend HUD Secretary Jack Kemp's response in committing the Department to taking actions to clear 60 percent of the pipeline this year. We urge the Subcommittee's continued vigilance in making sure that all viable projects go to closing in the near future.

The Association has serious misgivings about the Administration's proposal to restructure the Section 202 program by redirecting a substantial portion of the funding to leased housing. The short-term commitment to housing under the lease approach is not consistent with the commitment required to meet the projected long-term need. We strongly urge this Subcommittee to await the enactment of reforms being discussed in both Houses of Congress before considering reductions in the budget authority available to the Section 202 program.

Ultimately, the Association would like to see Section 202 funded at a level sufficient to produce 20,000 units per year as it did in the late 1970's. Recognizing, however, that the Subcommittee faces tight spending limits for fiscal year 1991, we ask that you fund Section 202 at a level sufficient to increase production above the pre-sequester fiscal year 1990 level. A modest increase would send a signal of the Subcommittee's continuing commitment to this essential program.

CONGREGATE SERVICES

The Congregate Housing Services Program (CHSP) has proven very effective in preventing unnecessary institutionalization among older and disabled residents of public and Section 202 housing. A 1987 report by the House Select Committee on Aging's Housing Subcommittee documented the success of the CHSP in preventing unnecessary institutionalizations. Despite this success, the Administration has proposed termination of the CHSP, a short-sighted approach that ignores the challenge faced by housing managers in providing for the needs of older tenants who are "aging in place." AARP recommends that the authorized $10 million be appropriated for this program.

PUBLIC HOUSING MODERNIZATION AND OPERATING SUBSIDIES

AARP is pleased that the Administration budget proposals would slightly increase public housing operating subsidies. We urge further increases in order to adequately address the management problems encountered by public housing facilities in our major cities. The Administration's proposal for funding of public housing modernization is a significant improvement over proposals in recent years. An important consideration in any long-term modernization program should be modifications to assist older residents who are aging in place. If the Subcommittee decides to increase modernization funds above current levels, AARP hopes that a portion of the funds will be devoted to such improvements.

PRESERVATION

AARP is very concerned about the potential impact of mortgage prepayments on older tenants. We applaud the Administration's emphasis on preserving these units as low-income housing in the HOPE proposal. Specifically, AARP supports subsidies to allow tenant or nonprofit buyouts of prepayment-eligible properties. Project-based Section 8 and flexible subsidies could also be effective in preventing the loss of prepayment-eligible projects, especially where tenants are not willing or able to buy their units. We would, however, oppose the Administration request to transfer excess rental receipts from the flexible subsidy program into the assisted housing account.

TECHNICAL ASSISTANCE

The recent trend in housing policy is to increasingly shift responsibility for housing activities from for-profit to nonprofit sponsors. Currently, Section 106 is the only program that provides technical assistance to nonprofit sponsors. AARP recommends that the program be significantly expanded both in its mission, which is currently limited to Section 202 sponsors, and in its funding level. The Section 106(a) grant program should be activated to encourage the capacity building that will be needed to do the jobs being asked of nonprofit sponsors.

HOUSING COUNSELING

The 1987 Housing Act authorized a reverse mortgage insurance demonstration for older homeowners who want to convert the equity in their homes into cash that can be used to meet basic needs for health care, home maintenance, and income. The Act requires that all older consumers receive counseling about home equity conversion and other options to address their needs. To expand home equity conversion opportunities will require additional funds for the counseling program. AARP recommends that $5 million be appropriated for housing counseling for fiscal year 1991.

CONCLUSION

Meeting the nation's future housing needs will require far-sighted leadership that looks beyond the narrow "bricks and mortar" issues of construction and finance to address the services needs of the special populations who currently predominate in federally assisted housing. The proposals we have made today are only a small step in the redirection of our national housing policy, so desperately needed if we are to address tomorrow's housing problems.

STATEMENT OF DAVID VAN NINGEN, EXECUTIVE DIRECTOR, HOPE HAVEN

SECTION 202 PIPELINE

Senator **Mikulski**. Mr. Van Ningen, we're going to turn to you now.

But each one has mentioned the 202 pipeline. Please know that we're hot on this. I mean, this committee has tried to function as a roto-rooter to get the pipeline moving here and we've received assurances both from Secretary Kemp and Commissioner Austin Fitts that the pipeline has the priority.

They've had so many signoffs and it's been so bogged down that I think they were shocked when we brought some of the case examples to their attention, many of which were provided by your organizations: programs in Maryland that have been approved with such backers as the Associated Catholic Charities and Governor Schaefer where they knew they were good for it. So we know that right now in the pipeline there's a substantial number of projects which, if just signed off on, could move our housing supply. And we would encourage you to keep a vigorous eye on the 202 projects as well as the congregate housing.

As someone who is a social worker and has worked with programs in the neighborhoods, I know that those were the two oldest and most reliable and most effective tools that we've had.

Well now I'm giving testimony longer than yours, Mr. Van Ningen; let's hear what you've got to tell us.

Mr. **Van Ningen**. We're going to take a shot at 202 as well.

Thank you for this opportunity——

Senator **Mikulski**. Pour it on; pour it on. We want it for the record.

RESIDENTIAL TRAINING FOR DISABLED

Mr. **Van Ningen**. My name is David Van Ningen and I'm the executive director of Hope Haven. We're located in northwest Iowa and provide services to over 200 children and adults who have disabilities. A significant component of those services is residential training.

In 1983, through the HUD section 202 program, we built and opened three homes which serve adults who have disabilities. As a result, many of the people served in these homes now have the opportunity to receive services in the community as opposed to the institution, and for many, these homes are a step toward even greater independence.

Because of the success of these homes in meeting the needs of those served and of the HUD program which made these homes possible, we're currently in the process of submitting an application for an additional house.

Hope Haven is also a member of the National Association of Private Residential Resources and I serve on the board of representatives of that association. Our association represents more than 500 agencies nationwide that collectively serve over 40,000 people. Many of our members have successfully used Federal programs under the jurisdiction of this committee.

In addition to seeking adequate appropriation levels, we respectfully ask this committee to direct HUD to report language to revise proposed rules regarding section 202.

LAND PURCHASES

Our specific concern is about the rules pertaining to the purchase of land. The proposed rules include only 78 percent of the total cost of a project being applied to land purchase. Hope Haven is in a very rural area. The population of our county is only 35,000 people, with most of the communities fewer than 5,000 people. Thus, land costs are probably less than our counterparts in urban areas.

Yet, as we proceed with a project for a six-bed group home, based on the HUD formula, we could only spend $22,000 for developed land, that's land with sidewalks, water, et cetera. These limits are simply ridiculous and unrealistic and may thwart the intention of Congress and our ability to successfully implement this program.

Thank you.

Senator MIKULSKI. Thank you very much for your comments.

[The statement follows:]

STATEMENT OF DAVID VAN NINGEN

The need for more community living arrangements is tremendous and is increasing each year while the stock of affordable, decent housing available to people with disabilities continues to dwindle. The budget of the Department of Housing and Urban Development has been cut more severely than that of any other major federal agency. The National Association of Private Residential Resources respectfully makes the following recommendations for fiscal year 1991 appropriations for programs administered by HUD that support the development of housing for people with mental retardation and other developmental disabilities:

- Sufficient funding in FY 1991 in the HUD Section 202 Direct Loan Program to support the construction of 12,000 new units of housing -- which will require an appropriation of at least $650 million, the full amount authorized in P.L. 100-242 for FY 1989. (Authorizing legislation for FY 1991 is currently pending.) A minimum of 25% of the total amount will be made available for the now free-standing program of Section 202 Housing for Handicapped People.
- Language that will require HUD to give adequate consideration to the price of property in cost limits established for the Section 202 subsidy mechanism.
- Sufficient FY 1991 funds to adequately support the subsidy mechanism for housing developed under the Section 202 program for Housing for Handicapped People.
- Support for the "Sheltered Plus Care" program for homeless persons with mental illness or problems with substance abuse, but with new dollars rather than at the expense of the Section 202 or other HUD programs.
- An appropriation of $10 million for the Congregate Housing Services Program in FY 1991, the full authorization amount for FY 1989.
- Priority in the HUD rental assistance programs for people with disabilities who are waiting to acquire Section 8 certificates or vouchers.
- An appropriation of $3 billion for the Community Development Block Grant program in FY 1991. This is the amount appropriated in FY 1990 and represents the full amount authorized under P.L. 100-242 for FY 1989.
- An appropriation of $82,000 the estimated amount used in FY 1990, for Section 106(b) seed money loans for nonprofit sponsors of Section 202 housing who require some assistance with start-up costs.
- An appropriation of $143.4 million for the Supportive Housing Demonstration Program in FY 1991, with $30 million earmarked for the Permanent Housing Program. This is $16.6 million over the amount appropriated in FY 1990, and is the figure recommended by the President for this program in FY 1991.
- An appropriation of $20 million in FY 1991 to enable HUD to develop educational and enforcement programs necessary to fulfill obligations established by the 1988 Fair Housing Amendments Act to both enforce the law and provide states with technical assistance to assure that their laws are "substantially equivalent" to Federal civil rights law.

INTRODUCTION

The National Association of Private Residential Resources currently represents more than 500 agencies nationwide that together provide residential services to more than 40,000 people with mental retardation and other developmental disabilities. Our members offer a full range of residential services in a variety of settings designed to enhance the development and self-dependence of those served. Many housing programs under the jurisdiction of this Subcommittee have been accessed by the people served by NAPRR members.

In 1988, the Coalition on Human Needs published a report of a year-long study of people who are poor. They found that 36 percent of the sample population interviewed for that study said that they lived in families in which at least one person was "disabled, impaired or seriously ill." This was nearly four times the number who were purposely selected to be interviewed by the Coalition as representing the "disabled poor." It is about twice as high as usual estimates of the incidence of disability among poor people who do not live in institutions, and nearly four times the estimate of the incidence of disability in the general population.

People with disabilities often confront more severe difficulties in acquiring adequate living arrangements than those who are not disabled. Many require services in association with the housing to avoid institutionalization in more costly settings that are funded entirely at government expense. People with physical disabilities may require barrier-free accommodations that can be provided only with modification of existing housing or through new construction. Standards developed by the National Fire Protection Association to assure that people who live in congregate settings for more than three people will be protected in case of fire are also growing increasingly strict. In addition, the BOCA building code now applies institutional standards to homes serving more than six people. These life-safety standards also often require substantial rehabilitation or new construction. Together these requirements frequently necessitate the availability of more funds than are needed by other citizens to access adequate housing, but people with disabilities usually have fewer resources.

The need for more community living arrangements for people with disabilities is tremendous and is increasing each year, but the stock of available, accessible, affordable, decent housing continues to dwindle. Funding for Federal housing programs must be restored.

SECTION 202 DIRECT LOAN PROGRAM

Each year the number of nonprofit organizations that apply for Section 202 funds far exceeds the number that receive fund reservations. There are substantial waiting lists for most of the 15,000 to 20,000 community living arrangements developed in this nation for people with mental retardation and other developmental disabilities. The General Accounting Office reported last year that many people with disabilities are living in substandard board and care homes. Others are living with parents who are growing too old to care for them; still others are homeless. A severe reduction in funding for new loan authority has occured in the Section 202 program since FY 1976 when 30,000 units were developed. It is estimated that in FY 1990, only 7,689 units will be approved, about one-quarter of those developed in 1976. President Bush is recommending that only 3,967 new units be funded in 1991, just 13% of the number for which funds were provided in 1976. Far more are urgently needed by people with disabilities who cannot find adequate housing.

NAPRR RESPECTFULLY ASKS CONGRESS TO APPROPRIATE SUFFICIENT FUNDING IN FY 1991 FOR THE HUD SECTION 202 DIRECT LOAN PROGRAM TO SUPPORT THE CONSTRUCTION OF 12,000 NEW UNITS OF HOUSING -- WHICH WILL REQUIRE AN APPROPRIATION OF AT LEAST $650 MILLION, THE FULL FUNDING LEVEL AUTHORIZED IN P.L. 100-242 FOR FY 1989. (AUTHORIZING LEGISLATION FOR FY 1991 IS CURRENTLY PENDING.)

When testifying before this Subcommittee in the past, NAPRR has addressed problems confronted by sponsors of Section 202 housing as a result of HUD cost-containment policies. Projects completed in the past few years have been unattractive, looking more like temporary barracks than a family home, and are often an eyesore in the neighborhood. Disability advocates had hoped that the new free-standing program, with a subsidy mechanism which was ostensibly to cover all costs associated with development of a 202 project, would be a panacea -- it has not been. Unfortunately, proposed rules that were published in January include a cost-limit formula that is totally unrealistic and inadequate to cover the purchase of land across the U.S. We are once again facing administrative program restrictions that will make it difficult if not impossible to use what is supposed to be a valuable resource.

NAPRR IS SEEKING SUFFICIENT FUNDS TO ADEQUATELY SUPPORT THE SUBSIDY MECHANISM FOR HOUSING DEVELOPED UNDER THE SECTION 202 PROGRAM; AND REPORT LANGUAGE THAT WILL REQUIRE HUD TO GIVE APPROPRIATE CONSIDERATION TO THE ACTUAL COST OF PROPERTY IN COST LIMITS ESTABLISHED FOR SECTION 202 PROJECTS.

NAPRR supports the President's "Sheltered Plus Care" initiative for homeless persons with mental illness or problems with substance abuse, but with new dollars rather than at the expense of the Section 202 program.

NAPRR SUPPORTS THE APPROPRIATION OF $247 MILLION IN NEW FUNDING FOR THE "SHELTERED PLUS CARE" PROGRAM.

CONGREGATE HOUSING SERVICES

As people with more severe disabilities move into community living arrangements from large institutional settings and from their family homes, there is a growing need for more in-home services. Federal, state and local sources of assistance have diminished over the past decade. Services such as meals, transportation, personal care and housekeeping assistance enable people with disabilities to remain, or become, relatively self-dependent, thereby avoiding institutionalization in more costly settings. Support services are essential to keep most specialized congregate housing programs viable. The Congregate Housing Services Program has assured that necessary services will be available to tenants of select Section 202 and public housing projects. One-third of those served by this program in recent years have been people with disabilities.

The Administration is once again recommending that this program be terminated. NAPRR believes it should be funded at the full authorization level. It has been an important resource for those who have been able to access these funds.

NAPRR IS ASKING CONGRESS TO APPROPRIATE $10 MILLION FOR THE CONGREGATE HOUSING SERVICES PROGRAM IN FY 1991, THE FULL AUTHORIZATION AMOUNT FOR FY 1989.

SECTION 8 / VOUCHER PROGRAMS

The Section 8/voucher programs may be the most cost-effective method of supporting housing for people with disabilities when decent, affordable housing is available. The Administration has recommended that a total of 99,399 units of assisted housing be funded in FY 1991 (including those provided for new Section 202 units). Last year the President asked that 100,000 additional units of assisted housing be funded under FY 1990 appropriations. NAPRR is seeking a minimum of 100,000 Section 8 certificates and/or housing vouchers in FY 1991 for people with low incomes to offset costs associated with leasing existing housing. In addition, our Association is asking that Congress instruct HUD to give preference to people with disabilities who are on waiting lists to obtain assistance for rental housing.

NAPRR RECOMMENDS THAT A MINIMUM OF 100,000 NEW UNITS OF HOUSING BE FUNDED UNDER THE SECTION 8/VOUCHER PROGRAM IN FY 1991, AND THAT CONGRESS INSTRUCT HUD TO GIVE PREFERENCE TO PEOPLE WITH DISABILITIES WHO ARE ON WAITING LISTS FOR HOUSING ASSISTANCE.

COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

The Community Development Block Grant program is a valuable and necessary program that is used by state and local governments in diverse ways. Some communities have used it more successfully than others to assist people with disabilities who are forced by economics or the location of essential resources (e.g., clinics, stores, transportation, etc.) to live in our nation's older urban centers. As cities deteriorate, abandoned buildings often attract undesirable activities, furthering decay and both directly and indirectly affecting people with disabilities and others with low incomes who live in these areas. The private sector has utilized CDBG funding in some communities to acquire and rehabilitate buildings used as apartments, congregate living arrangements, workshops and day-program settings. The need for housing and adequate day-program space is well documented. NAPRR members report that local planning for the use of CDBG funds enhances concern for others and gives disability advocates an opportunity to become an integral part of the process. The relationships that are developed during planning continue after the project has been completed, assisting the integration of people with disabilities into the revitalized community.

NAPRR RECOMMENDS THAT $3 BILLION BE APPROPRIATED FOR THE COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM IN FY 1991. THIS IS THE AMOUNT APPROPRIATED FOR THE PROGRAM IN FY 1989 AND IS THE FULL AMOUNT AUTHORIZED UNDER P.L. 100-242.

OTHER RECOMMENDATIONS FOR FY 1991 HUD FUNDING

NAPRR RECOMMENDS THAT $82,000 BE APPROPRIATED FOR THE SECTION 106(b) SEED MONEY LOAN PROGRAM IN FY 1991. THAT IS THE ESTIMATED AMOUNT TO BE USED THIS FISCAL YEAR AND REPRESENTS A CONSERVATIVE DEGREE OF SUPPORT, PARTICULARLY SINCE IT IS EVENTUALLY REPAID WITH SECTION 202 FUNDS.

NAPRR SUPPORTS THE PRESIDENT'S BUDGET REQUEST FOR $143.4 MILLION IN FY 1991 APPROPRIATIONS FOR THE SUPPORTIVE HOUSING DEMONSTRATION PROGRAM.

NAPRR STRONGLY RECOMMENDS THAT $20 MILLION BE APPROPRIATED IN FY 1991 TO ENABLE HUD TO DEVELOP THE EDUCATIONAL AND ENFORCEMENT PROGRAMS NECESSARY TO FULFILL OBLIGATIONS OF THE FAIR HOUSING AMENDMENTS ACT OF 1988, WHICH PROHIBIT DISCRIMINATION OF PEOPLE WITH DISABILITIES.

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Senator **MIKULSKI**. Is Ms. Muha, the National Leased Housing Association representative present.

Ms. **MUHA**. Yes.

Senator **MIKULSKI**. Do you want to come on up or you're welcome to stay there.

Ms. **BEDFORD**. Thank you.

Senator **MIKULSKI**. It's interesting, isn't it?

Ms. **BEDFORD**. Oh yes.

Senator **MIKULSKI**. I wish some other people were here to listen, not only my colleagues in the Senate, but others who think they know about housing.

You know, this is the best part. I always love the public witnesses because you get real practical, concrete recommendations.

Let's hear what you have to tell us.

STATEMENT OF DENISE MUHA, STAFF DIRECTOR, NATIONAL LEASED HOUSING ASSOCIATION

NEW HOUSING INITIATIVE

Ms. **MUHA**. Thank you, Madam Chair.

NLHA's main purpose in presenting testimony today is to urge this subcommittee to not only fund assisted housing at current services levels for fiscal year 1991, but to request an additional $4 billion to cover the cost of a new housing initiative.

While $4 billion seems like a tremendous request, especially in light of today's budgetary constraints, in actuality, $4 billion would only represent a 6-percent restoration of the 70-percent cuts experienced by the housing field in the last decade. NLHA has worked closely with the Senate Housing Subcommittee on the National Affordable Housing Act, which has been cosponsored by Senators Cranston and D'Amato, and we feel that this legislation will go a long way in addressing the shortage of affordable housing in this country. However, without adequate funding, we feel that this legislation would be meaningless.

In addition to new initiatives, NLHA endorses funding for many current programs, including the certificate and voucher program, the section 202 program, the mod rehab program, et cetera.

In regard to tenant-based assistance, NLHA urges that until the certificate and voucher programs are merged into one form of assistance—which, by the way, NLHA fully endorses—both programs should be funded equally. We recommend funding for 50,000 units for each program.

8.2 PERCENT ADMINISTRATIVE FEES

In addition, because of increased costs in administering the certificate and voucher programs due to various HUD reforms, we recommend that moneys be appropriated to fund an 8.2-percent administrative fee for both programs. We would also request that the 8.2-percent fee apply to both incremental——

Senator MIKULSKI. Ms. Muha? Slow down. I mean, we'll give you your time. And talk into the microphone.

You know, this is a committe that believes in the empowerment of women, so speak up.

Ms. MUHA. OK.

Senator MIKULSKI. Nobody is going to tell you to behave yourself on this committee. [Laughter.]

Ms. MUHA. Thank you, Madam Chair.

We would also request that the 8.2-percent fee apply to both incremental and nonincremental units. Calculating multiple fees has become an accounting nightmare for public housing authorities.

NLHA is most concerned about preserving the existing stock of low-income housing. We have been working with other industry groups to attempt to propose a solution to this vexing prepayment issue. Any solution will require funding for incentives to keep the housing low income. In this regard, we request that this committee provide funding to implement a fair solution.

We very much appreciate the arduous task ahead of you and thank you for letting us present our views.

Senator MIKULSKI. You're welcome.

And you weren't here and I'll repeat for Ms. Morris that, again, if there's supportive documentation representing your organization, it's most welcome. We appreciate everybody trying to condense.

[The statement follows:]

STATEMENT OF DENISE MUHA

My name is Denise Muha. I am Staff Director of the National Leased Housing Association on whose behalf I am testifying today.

The National Leased Housing Association represents more than 750 member organizations involved in low income multifamily rental housing—non-profits, public housing authorities, developers, management agents, financiers and syndicators. All of our members share an overriding concern for the provision of affordable rental housing for low and moderate income Americans. It is this concern that brings us before you today.

Our primary purpose here today is to urge this committee, at a minimum, to fund assisted housing in fiscal year 1991 at full current services levels plus an additional $4 billion to cover costs of a new housing program.

This year increased funding for housing is crucial as Congress works towards passage of landmark housing legislation which would expand the supply of affordable housing. Congressional efforts are meaningless without significant funding.

As you well know, since 1981, budget authority for assisted housing programs has been cut by over 70 percent. We cannot emphasize too strongly that assisted housing has already taken more than its fair share of budget reductions; the increase of $4 billion would restore only 6 percent of these cuts. Although specific programs are subject to thorough examination, we must never lose sight of the bottom line conclusion that the federal government has an essential role to play in assuring that every American is adequately housed. This point has been reemphasized again and again in various task force reports on the current national housing crisis. In recent years, more and more reliance has been placed on utilizing existing housing through such sound programs as PHA administered Section 8 certificates. However, the federal government has the obligation to assure that the housing stock exists in the first place. Rental assistance is of little help in markets where there is no housing. Whether such stock is produced through deep or shallow subsidies, and the varying degrees of interplay between federal, state or local action are subjects for fair debate. But the traditional federal role in low income rental housing production must continue.

We are concerned about not only the dollar funding level, but also the programs that are to be funded. NLHA urges continued support for the Section 8 certificate and voucher programs, the Section 8 moderate rehabilitation and moderate rehabilitation SRO programs and the Section 202 program.

Though the debate over the effectiveness of vouchers versus certificates continues, NLHA is working with HUD and Congress to merge the two programs to combine the best features of each. In the interim however, we urge that the certificate program be funded at an equal level with the voucher program. The Administration has requested 27,000 less incremental units than it did in fiscal year 1990. Given the great need, we feel this is a travesty. We feel it would be appropriate to fund each program at 50,000 unit level which would approximate the Administration's request last year. And in light of the increasing costs of implementing both the certificate and voucher programs, due to various HUD reforms, we would also urge that monies be appropriated to provide for the 8.2-percent administrative fee that is called for in the Housing and Community Development Act of 1987. It is important that this fee be 8.2 percent for all units both incremental and non-incremental, so as to avoid the administrative burden of calculating multiple fees.

With regard to Section 8 certificates, it is essential that monies be appropriated for 15 years of assistance to ensure the feasibility of federally authorized housing tools including project based assistance and the low income housing tax credit. Under the project based assistance program, certificates are tied directly to a rehabilitated or newly constructed unit. It is very difficult, if not impossible, to obtain the necessary private financing needed to utilize project based assistance, without a long term guarantee of rental assistance. Likewise, where the low income housing tax credit is used with project based certificates, the certificate term should be 15 years so as to conform with the low income requirements of the tax credit. A shorter term increases the risk of a recapture of the tax credits and acts as a severe disincentive to investors who cannot afford such a risk. Such long range monetary commitments provide the financial guarantee necessary to induce crucial private investment.

In recognition of the lack of availability of affordable existing housing in many areas, it is important to be able to rehabilitate those buildings that, with a little work, could easily house many homeless Americans. Given the tighter monitoring and allocation procedures included in the HUD Reform Act of 1989, it is important to once again fund the Section 8 moderate rehabilitation program, which when properly administered, can be very successful in providing much needed housing.

Furthermore, Section 801 of the HUD Reform Act of 1989 contains a Section 8 contract rent adjustment settlement which is currently being litigated on constitutional grounds. If the courts rule that the provision is in fact constitutional, adequate monies should be appropriated to ensure that owners of Section 8 housing receive the settlement outlined in the statute.

With the number of new units being produced at a record low, and the lack of affordable housing reaching unprecedented levels, we have an ever increasing and unconscionable homeless population. Preservation of low income units is critical! As the Housing and Community Development Act of 1987 prepayment restrictions expire September 30, a number of proposed solutions which include incentives to keep the housing in low income stock, have been put forward to address this critical problem. We urge this Committee to make available the necessary monies to implement a fair solution that protects both owners' and tenants' rights. In addition, we strongly recommend that adequate funding be provided to facilitate the sale of HUD-owned projects to aid in the preservation effort.

Finally, we cannot ignore the escalating problem of expiring subsidy contracts. We applaud this Committee and the Administration's past commitment to funding all the contract renewals and we hope that it will continue to do so for the future. This nation's housing needs are too great to risk the loss of any further funds.

We look forward to working with this Subcommittee and we appreciate being able to share our thoughts with you.

STATEMENT OF MARION MORRIS, DIRECTOR OF LEGISLATIVE SERVICES, NATIONAL ASSOCIATION OF HOUSING AND REDEVELOPMENT OFFICIALS

Senator **MIKULSKI**. Ms. Morris?

Now you worked for Senator Mathias, didn't you?

Ms. **MORRIS**. Yes, Madam Chair.

Senator **MIKULSKI**. Welcome back to the Hill.

Ms. **MORRIS**. Thank you.

My name is Marion Morris and I'm the director of legislative services for the National Association of Housing and Redevelopment Officials.

While we understand the need for tight time limits on public testimony on the many important domestic needs addressed in your subcommittee bill, we all must admit this procedure does a disservice to everyone involved. Clearly there has to be a better way for you and your subcommittee colleagues to learn first-hand how the money this subcommittee appropriates is used. The many success stories, such as the Hubble space telescope, EPA efforts to clean up Chesapeake Bay, the new VA hospital in Baltimore, the University of Maryland cyclatron and the many low-income Marylanders with a decent place to live thanks to HUD-assisted housing and community development programs.

We know you've had the opportunity to see many of these facilities first-hand and to meet the people who benefit from your subcommittee's spending as well as with the fine people who are carrying out Federal programs at the local level.

On behalf of the directors of several Maryland housing and community development agencies who have recently invited you to see their operations and the people they serve at ground level, I hope you will be able to find the time to meet with them during the Memorial Day recess. They have a lot to share with you which they believe will help you in your deliberations as you determine funding levels for the many HUD programs which these dedicated professionals carry out at the local level.

This Subcommittee funds very diverse but important domestic agencies and programs which, taken together, make for a strong America. You and your subcommittee colleagues are the good guys who wanted to serve on this subcommittee and confront the difficult spending choices you inevitably must make each year between and among agencies and programs.

NO CANNIBALIZING

With respect to the HUD portion of this spending bill, we ask two things: First, no cannibalizing. That is, don't take from one proven program to fund another equally worthy one; it only robs Peter to pay Paul.

Two, new mandates need new money. New congressional mandates such as lead paint abatement in public housing, as well as new congressional initiatives, such as the Cranston-D'Amato housing bill, must have new money. We are encouraged that both Senate and House budget resolutions contain such funds. With bipartisan budget discussions now occurring between Congress and the White House, we, as well as many others here today, have some ray of hope that the Gramm-Rudman-Hollings sequester guillotine will not chop our programs once again with the perverse effect this year of cutting already starving domestic programs while protecting defense spending.

Thank you for my 2 minutes. A summary of the programs and the dollar levels which NAHRO is seeking is attached to my prepared statement.

Senator **Mikulski**. Thank you, Ms. Morris. And, believe me, given the time constraints, I'm as frustrated as you are.

The record should show that the committee received 125 requests for public witnesses; 90 have been accommodated. As you could see earlier, people we accommodated didn't even bother to show up. Since last year we've expanded public witness hearings from 2 days to 3 days, and this particular committee chair wishes she was as thin as she is stretched.

And we hope tomorrow, if we don't have votes, I'll be at a public housing project looking at Federal housing, the Nehemiah dedication, and if I had my way I'd spend 10 days in Washington and 20 days in the field. But your comments are well taken and we just wanted the record to show the constraints that we had to operate under.

[The statement follows:]

STATEMENT OF MARION MORRIS

On behalf of the National Association of Housing and Redevelopment Officials, thank you Madam Chair, and members of the Subcommittee for doing your best to fully fund public housing operating subsidies in the current fiscal year. The $72 million this Subcommittee provided, while not fully funding the Performance Funding System at $122 million, will go a long way toward covering our costs. However, the $50 million shortfall remains.

Turning to fiscal year 1991, there are a number of programs upon which housing authorities rely in order to provide decent, affordable places to live in stable communities for so many of our low-income citizens. We are hopeful that as the Subcommittee considers the FY'91 Public Housing appropriation, it will take the current $50 million shortfall into consideration.

Public Housing Production

NAHRO firmly believes we must add to the supply of affordable housing for low-income Americans in those communities where the private housing market has few or no affordable vacant units.

The number of households earning less than $5000 per year increased 53 percent between 1974 and 1987 to 7.2 million. During the same time period, two million units of affordable rental housing have been abandoned, demolished, or converted to higher rents or private ownership.

As of last year there were more than one million households on public housing waiting lists nationwide. Many communities have closed their waiting lists due to this inordinate demand.

Public housing is the only permanently affordable low-income housing in this country. It has been home to millions of Americans unable to make ends meet. It has proven its worth and cost-effectiveness. Unlike Section 8 housing assistance contracts, it doesn't have to be renewed every five or fifteen years with the atterdant budgetary and paperwork headaches which that presents.

Well-designed public housing on scattered sites has proven successful in communities throughout the United States. We believe we should build on this success and propose adding to the public housing supply by 20,000 units in fiscal year 1991. Our estimated cost for restarting this supply pipeline is $1.5 billion.

In addition, NAHRO calls for a line-item appropriation of $375 million for public housing one-for-one replacements to assure that there is no net loss from the public housing inventory due to sales to resident management corporations or other entities or due to demolition in order to reduce density. We estimate this dollar amount will replace approximately 5,000 public housing units. As you know, HUD has a substantial backlog of demolition and disposition requests which it has approved, but which lack the requisite replacement funding.

Public Housing Operations

To support on-going maintenance and operations, we estimate $2.1 billion will be required pursuant to the Performance Funding

System for public housing operating subsidies in the next fiscal year.

As you know, the Department continues to have difficulty projecting total PFS needs from year to year and consistently underestimates operating subsidy needs by assuming a variety of cost savings which either require legislation or have yet to be realized. We continue to be troubled by the Department's failure to inform this Subcommittee of its revised estimates of PFS needs as they become available and to send forward to OMB and the Congress the request for supplemental appropriations needed.

We propose a $2.53 billion level for public housing modernization next year. This will enable some PHAs to begin to work off the backlog of modernization needs that continues to grow daily the longer this funding is deferred.

The Congressional mandate to PHAs to test for and abate lead paint remains unfunded while the five-year clock to complete the job continues ticking away. The Congress must face its obligation to fund this new mandate with new money. Based on the most recent internal HUD estimates, NAHRO believes $600 million will help get this program off the ground.

Supportive Services

To assist families living in public housing to become self-sufficient, child care is essential for working mothers. We believe $20 million in a separate line-item appropriation for public housing child-care grants would help in this matter.

Just as we do not support diverting current HUD programs to new purposes under Secretary Kemp's "HOPE" rubric, we do not support earmarking by the Congress for new initiatives, be they child care or lead paint abatement, from current programs. Such practices simply short-change one need for another.

The Public Housing Drug Elimination Grant program needs $175 million next year as we all seek to piece together the federal and local resources necessary to rid public housing communities of illicit drug activity.

Secretary Kemp's waivers of HUD lease and grievance procedures for those states with substantially equivalent tenant-landlord rights, remedies, and procedures have enabled PHAs to respond to illicit drug activity and protect the vast majority of public housing residents whose quiet enjoyment of their homes is threatened.

Congregate Services

The Congregate Housing program is a proven means of forestalling premature institutionalization of frail elderly persons living in public housing and Sec. 202 senior buildings. Program costs, including rent, have been documented to be about one-third less than the cost of intermediate care in nursing homes. Annual savings have been conservatively estimated to range between $4,233 and $5,880 per person.

Of the 1.52 million seniors living in federally-assisted housing, an estimated 365,000 have some fraility and are unable to carry out daily living unassisted. Some 105,000 of these residents are at risk of being institutionalized.

Currently, only 60 PHAs and nonprofit sponsors operate congregate services serving a total of 2200 frail elderly. We urge the program's continuation at a $10 million level.

Section 8 Rental Assistance

Currently, there are more than 800,000 families and seniors on waiting lists nationwide for Section 8 rental assistance.

This program has been the principal resource to house low-income families, elderly and handicapped individuals. We urge its continuation at a level of $2.5 billion, which we estimate will assist an additional 80,000 households.

Essential to the effective operation of the Section 8 program is an adequate administrative fee which fully covers the costs to the PHA of taking tenant applications, screening, counselling, verifying and recertifying incomes annually, soliciting and convincing private property owners to participate, and certifying that their properties meet HUD Housing Quality Standards

An 8.2 percent administrative fee has been authorized. We seek its full funding for new Section 8 units.

Renewal of expiring certificates and vouchers is a commitment both Congress and the President have made. We applaud this federal commitment to our nation's low-income tenants in federally-assisted housing and urge an in-kind renewal -- vouchers for vouchers and certificates for certificates. In addition, we seek a line-item appropriation of 15-year Section 8 certificates at $234 million.

Neighborhood and Community Development

The Community Development Block Grant Program has a fifteen year track record of stabilizing neighborhoods, meeting citizen needs for public community facilities and services, and local economic development.

Housing rehabilitation, neighborhood commercial development, infrastructure, senior centers, community facilities, child care, crime prevention and health care are among the versatile uses for this flexible block grant. CDBG is the major source of federal funding available to meet these local needs.

Yet the needs continue to grow while the funding for this program in real terms has declined by more than 50 percent during the past ten years. Also, the 1987 Housing and Community Development Act added new housing construction, installation of 911 Emergency Telephone Systems, and public housing child care grants as new eligible activities. That same law imposed new mandates on localities using the program by requiring more generous relocation benefits than those required for other public displacees under the Uniform Relocation Act and by requiring a local commitment of ten years of affordable relocation housing.

These burdensome new requirements in the absence of federal resources to carry them out are counterproductive for all parties concerned: localities and their citizens as well as the federal government. NAHRO believes a $4 billion appropriation is justified for the CDBG program.

I need not remind this Subcommittee that the program had an appropriation of $3.7 billion nine years ago in 1981 when there were fewer entitlement communities and fewer mandates and eligible activities. We cannot continue to stretch this program beyond all reasonable limits and promise our citizens community improvements which we cannot deliver due to reduced federal funding.

Lump Sum Drawdowns

This Subcommittee prohibited localities from drawing down their CDBG entitlement in a lump sum as one of the many "creative savings" achieved in the current fiscal year. That prohibition on lump sum drawdowns has had serious repercussions in many communities. Communities have relied on the lump sum as leverage with their local lending institutions where they deposited the funds as a means of financing CDBG activities at levels that otherwise were not achievable.

We urge this Subcommittee to permit this local leverging process to resume in FY 1991.

Section 108 Loan Guarantee Program

Similarly, this Subcommittee initially reduced this leveraging program in the current fiscal year. NAHRO has worked closely with the authorization committee to revise and make more workable these Loan Guarantees, particularly in the face of the demise of the UDAG program. That revised program is included in the markup document being debated this week in the authorizing committee.

We urge a continued commitment to this program, particularly in light of the loss of a number of other economic development tools. NAHRO suggests the loan guarantee limit be increased to $500 million to make this a truly workable program.

Under the program, entitlement communities may currently borrow up to three times their CDBG grant, pledging future CDBG grants as security. The typical repayment period is six years. In the past several years, all of the available loan authority has been used, enabling communities to do things like acquire land for housing and job-generating commercial development in depressed areas. Keep in mind that this program involves no budgetary outlays.

Neighborhood Preservation

Three programs have been the workhorses of rehabilitation of affordable rental housing and homeownership for first-time homebuyers.

The Section 312 Rehab Loan Program has been in operation for 25 years. It is a proven below-market interest rate loan for those who cannot afford or secure market rate rehab loans due to their fixed or low incomes or the location and risk of the property. The program, as the Subcommittee knows, has been self-supporting through loan repayments since 1980 and has required no appropriations since then.

Imagine our surprise when this Subcommittee, again resorting to creative financing in FY'1989, diverted $200 million of those loan repayments to shore up the CDBG account!

Madam Chair and Members of the Subcommittee, NAHRO as well as you should be troubled by such "cannibalizing". We are hurting those we seek to serve in communities across this land and are short-changing the American people.

The 312 program works hand-in-hand with the popular Urban Homesteading program by providing the rehab loans needed for first-time homebuyers to fix up vacant repossessed homes they purchase in their communities. So it is critical that the program be revived, not killed as this and the previous Administration has sought to do.

Secretary Kemp talks a good game about homeownership and empowerment. Yet, the Urban Homesteading program coupled with 312 Rehab Loans has been doing just that for years.

Both programs expand and preserve homeownership opportunities for low- and moderate-income Americans. Contrary to what HUD would have you believe in proposing to terminate the program, it is not duplicative. Indeed, the program permits much more substantial rehab than other programs and restores those units most in need of work. The owners and residents of these units can thus avoid the need to find other, often scarce affordable units or face the possibility of homelessness where such units are not available. We urge you to insure the continuation of this essential program.

The Rental Rehabilitation program has helped to preserve more than 100,000 affordable rental units since its inception in 1984. At an average per unit rehab cost of $4200, this program is a bargain which, coupled with Section 8 assistance, enables many lower income citizens to afford to rent.

NAHRO strongly urges you to fund the Rental Rehabilitation program at $200 million as you did in FY'1988. In addition to the high production rate and cost-effectiveness of the program, it leverages about two dollars in private money for every public dollar spent and produces affordable units in small properties not reached by other programs. In fact, 92% of the tenants in units rehabilitated under the program are below 80% of median income and the average Rental Rehab property has 4.8 units. Many owners have invested in additional small properties in deteriorating neighborhoods once they have participated in the program.

Rental Rehab is flexible so that both for-profit and nonprofit investors can participate in restoring affordable housing in carefully targetted neighborhoods. The delivery system is in place and working well for this program. We urge this Subcommittee to "invest" in this neighborhood stabilization program which has proven so successful.

Homeless Assistance

NAHRO supports the following funding levels for McKinney Homeless programs in FY'91:

Emergency Shelter Grants	$131.2 Million
Transitional Housing	$133
Supplemental Assistance	$12
Sec. 8 SRO	$133
Emergency Food and Shelter (FEMA)	$140.7

In addition, we strongly believe in the Housing Counseling program as a means of preventing homelessness. By providing mortgage default counseling and budget counseling this program enables homeowners to avoid foreclosure and renters to avoid eviction. This is a small, but essential program in staving off unnecessary homelessness.

While we recognize the stop-gap nature of McKinney programs and their relatively high per unit operating costs compared to public housing, we believe we must continue to provide homeless assistance on an emergency basis to those who have slipped out of the safety net, as well as some transitional assistance to help homeless families and individuals reenter the private housing market.

Until such time as we have a credible production program for affordable rental housing, we will continue to be confronted by the enigma of homelessness in the richest country in the world.

Thank you for the opportunity to appear before you today on behalf of NAHRO.

Program	NAHRO Position (Dollars in Millions)
PUBLIC HOUSING	
Production	
Major Reconstruction/Development	$1,500
Indian Housing	400
Operation	
Operating Subsidies	2,100
Modernization	2,530
Lead-Based Paint Testing and Abatement	600
Support Services	
Drug Elimination Pilot Program	175
One-for-One Replacement	
Public Housing Construction	375
15-year Section 8 Certificates	235

Program	NAHRO Position (Dollars in Millions)
COMMUNITY DEVELOPMENT	
• CDBG	$4,000
• 108 Loan Guarantees	500
• Urban Homesteading	25
• Section 312 Rehabilitation Loans	100
• Rental Rehabilitation	200
HOMELESS	
• Emergency Shelter Grants	$131
• Transitional Housing/Supportive Demonstration	133
• Supplemental Assistance	12
• Section 8 SRO	133
• Housing Counseling	25
RENTAL ASSISTANCE	
• Section 8 Certificates/Vouchers	$ 2,500
• Section 8 Moderate Rehabilitation	1,300
• Section 8 Expiring Certificates/Vouchers	5,040
• Section 8 Expiring Loan Management Set Asides	3,100

Senator MIKULSKI. Is there anyone else who wishes to add to their testimony?

[No response.]

Senator MIKULSKI. My questions are not for you, my questions are for HUD. I think your testimony is pointed, well taken, offers excellent examples and a very good framework for this committee to pursue.

We want to thank you for the work that you do with the committee, the dedication that you exemplify and, as we go through what I think will be a very tough year, we look forward to further conversations with you.

Thank you very much.

We now are going to focus on the VA medical issues and are going to ask Mr. Raymond Woosley, the American Heart Association; Dr. John T. Farrar, the Digestive Disease National Coalition; Mr. William Dewey of the Federation of American Societies for Experimental Biology; John Lipkin of the American Psychiatric Association; and Christopher Saudek of the American Diabetes Association.

Good morning, gentlemen. I know that you're very much interested in the issues pertaining to VA medical care and research. As you know, it was this subcommittee last year that moved the appropriation, $900,000 more than had been originally requested.

But why don't we start off with Dr. Woosley, representing the American Heart Association.

DEPARTMENT OF VETERANS AFFAIRS

STATEMENT OF RAYMOND L. WOOSLEY, M.D., Ph.D., CHAIRMAN, CARDIOVASCULAR DRUGS COMMITTEE, AMERICAN HEART ASSOCIATION

Dr. WOOSLEY. Thank you, Madam Chair.

Cardiovascular diseases, including stroke, remain America's No. 1 killer, claiming nearly 1 million lives each year. More than one in four Americans suffer some form of cardiovascular disease at an estimated cost in 1990 of $94 billion in direct medical expenses and lost productivity.

MEDICAL RESEARCH SERVICE PROGRAM

The VA Medical Research Service Program, including its cardiovascular research, makes up a small portion of the VA budget, but we believe that it deserves the strong support of both the American Heart Association and Congress.

The VA is a major contributor to this Nation's clinical research. Thus, the VA assumes a unique role in the research community because of its ability to immediately translate basic research findings into clinical practice.

The President's proposed budget of $165 million for the VA Medical Research Service is a 9-percent decrease from the fiscal year 1990 appropriation and includes a reduction of 355 FTE's. These proposed reductions will affect all components of the Medical Research Service:

For investigator-initiated studies, 75 percent of the MRS budget, the President's budget proposes a 14-percent decrease in funding and a reduction of 338 FTE's resulting in a loss of 325 programs.

Cooperative Studies Program: These studies, unique to the VA, provide a mechanism in which research on the effectiveness of diagnostic and therapeutic techniques can rapidly achieve results by pooling data on patients from a number of VA hospitals. Many landmark cardiovascular clinical trials have been supported under this program, including studies in hypertension treatment, coronary bypass surgery, and currently in heart failure and sudden death. The budget proposes a 3.09-percent decrease for this mechanism of research.

Career development awards: This budget proposes a 6.88 percent decrease and reduction of 11 FTE's, forcing an estimated 75 programs to be completed and not replaced.

The President's budget for the VA Medical Research Service Program is unacceptable and unrealistic. The American Heart Association recommends an appropriation of $219 million. Our suggested appropriation, which is consistent with that of the Friends of the VA, would only restore the Medical Research Service Program to its fiscal year 1985 level of support. It would continue current cardiovascular research momentum and help maintain the VA's vital role in the overall scientific effort in this field.

Thank you.

Senator MIKULSKI. Thank you, Dr. Woosley. That was pretty serious testimony that you gave and we are going to really keep it close to us as we go through our deliberations.

Dr. WOOSLEY. Thank you.

Senator MIKULSKI. We thank you. Again, I'm sure you've heard my remarks regarding supporting and amplification documents.

[The statement follows:]

STATEMENT OF DR. RAYMOND L. WOOSLEY

Good afternoon Mr. Chairman and Members of the Subcommittee, I am Raymond Woosely, M.D., Ph.D., professor and chairman, Department of Pharmacology at Georgetown University Medical Center, and for the American Heart Association, chairman of the Cardiovascular Drugs Committee. I appear today on behalf of the American Heart Association (AHA), our 56 affiliates and over 2.7 million volunteers. It is my pleasure to offer the AHA's comments and FY 1991 funding recommendation for the Department of Veterans Affairs' Medical Research Service (MRS) program.

The AHA is the only voluntary agency in the United States devoting all of its human and financial resources to one goal: the reduction of disability and death from cardiovascular diseases, including heart attack, stroke, and other blood vessel diseases. In reaching this end, we work closely with related Federal research, education, and prevention programs.

Cardiovascular diseases hold the deadly distinction of being America's number one killer -- a death occurs every 32 seconds. Each year, heart and blood vessel diseases kill nearly one million Americans, almost as many as cancer, accidents, pneumonia, influenza, and all other causes of death combined. Currently, more than one in four Americans suffer some form of cardiovascular disease. About 61 million Americans experience high blood pressure, approximately 5 million suffer from coronary heart disease, over 2 million endure rheumatic heart disease, and more than 2 million have survived a stroke.

Make no mistake, cancer, and other diseases are a real threat, but they must be kept in perspective. In 1987, about 477,000 Americans died of cancer. In that same year, more than 13,000 Americans died of AIDS. These deaths are tragic, but the tragedy is compounded if Americans focus on these diseases at the expense of one that claims more than twice as many victims. Cardiovascular diseases are killers.

In 1990, the total economic costs associated with cardiovascular diseases are estimated to be $94.5 billion in direct medical expenses and lost productivity. However, there is encouraging evidence that we are making progress against these diseases. From 1977 to 1988, the age-adjusted death rate from heart attack fell by 30.9 percent and that from stroke declined by 37.3 percent. Also, the age-adjusted death rates from rheumatic fever, congenital heart disease, and hypertensive disease continue to decline.

This downward trend is directly related to the increased focus on the prevention of cardiovascular diseases by controlling risk factors, remarkable research breakthroughs, and to the translation of these important findings into clinical practice. These research advances not only save lives but also improve medical treatment of patients with cardiovascular diseases.

The AHA places its major emphasis on disease prevention, investing heavily in scientific research. Since 1949, we have invested more then $823 million in research. The size of this financial commitment makes the AHA second only to the federally sponsored National Heart, Lung, and Blood Institute (NHLBI) in the amount contributed to cardiovascular research. However, the battle against cardiovascular diseases depends on the level and quality of overall support of basic and clinical research and prevention efforts. Although we continue to devote a larger portion of our resources for research, AHA cannot win this fight alone. Sufficient funds for federal biomedical research are critical. Unfortunately, the Administration has proposed a significant reduction in funding for the VA Medical Research Service program.

The Department of Veterans Affair's Medical Research Service (MRS) program, and in particular its cardiovascular research support, makes up a small portion of the overall VA budget; however, we believe that it deserves the strong support of both the AHA and the Congress. In FY 1990, the MRS expended about $21.5 million or 11 percent of its budget on cardiovascular research. Although the mission of the VA health care system is the provision of high quality medical care to the veteran patient, its research constitutes a significant part of this Nation's total biomedical research system. Discoveries from VA-supported research benefit science and this world's health as a whole.

Each year, a number of the VA's 2,400 investigators, at its 132 VA Medical Centers across the United States have been honored with national and international awards. In the last few years, several VA investigators have been acknowledged for their work in the area of cardiovascular research. In 1986 the AHA honored Dr. Brian B. Hoffman, an investigator at the Palo Alto VA Medical Center, with our prestigious Established Investigator Award for work on regulation of blood vessels to adrenaline and noradrenaline, which dramatically effect the heart and circulation. Dr. Aaron J. Marcus, with the New York City VA Medical Center, received the VA's annual 1987 Middleton Award for his pioneering status of the mechanisms of blood clotting and intravascular thrombosis. In addition, he studied natural inhibitors of clotting in the treatment of stroke and coronary artery disease. Also, in 1987, Dr. Daniel O'Connor, of the San Diego VA Medical Center, was awarded the AHA's Harry Goldblatt Award for his achievements in the field of hypertension research. Dr. John Sterling Meyer, with the Houston VA Medical Center, received Japan's 1988 Mihara Award for basic and clinical research in cerebrovascular disorders.

The FY 1991 budget proposes $165.459 million for the VA MRS, a 9 percent decrease from the FY 1990 appropriation of $181.734 million. The President's request represents a decrease from the FY 1990 appropriation of $16.275 million and 355 FTE. Compared to a FY 1991 current services budget of approximately $187.800 million, the proposed reduction for the MRS program is 12.2 percent. For the past three years the Department of Defense (DOD) supported collaborative research projects with the VA MRS. Without DOD resources in FY 1991, the total decrease from the MRS program's FY 1990 appropriation will be $29.6 million or a 14.2 percent reduction. This proposed fluctuation in resources has created considerable uncertainty within the VA medical centers, making planning extremely difficult.

These recommended reductions are short-sighted because VA cardiovascular research represents an integral part of the overall scientific effort in this field. In FY 1988, diseases of the circulatory system represented over 16 percent of the primary inpatient discharges at VA medical centers. Moreover, these proposed cuts will have a negative impact on the entire VA's Medical Research Service program.

Also, the proposed decrease in research personnel will have a negative impact on the VA's ability to administer and maintain a quality staff for its biomedical research program. Suggested reductions will be especially severe in the MRS program, which is slated to receive a disproportionate number of the overall proposed cuts. To administer and oversee a successful research program, the VA must maintain necessary and proper resources to accomplish its mission. The AHA recommends that this Subcommittee increase funding for research personnel so the VA MRS can sustain FY 1990 program levels.

Moreover, recommended cuts in research personnel are short-sighted in light of the VA's requirement to prepare for future needs of veterans. VA's planning models recognize that its aging patient population demands more care. By the year 2000 the percentage of veterans over age 65 will be about three times that of the general population, 37 percent and 13 percent, respectively.

Proposed reductions in the President's budget affect all components of the MRS program of interest to the AHA:

- o *Investigator - Initiated Studies: This program supports 1,375 investigators and constitutes 75 percent of the MRS budget. Under the President's budget, investigator-initiated studies would receive a 14 percent decrease in funding and a reduction of 338 FTE, resulting in a loss of 325 programs. These investigators comprise the core of all VA research and provide the preceptorship for the career development awardees. Decreasing the number of these investigators, as recommended in the budget, would adversely affect the infrastructure of the entire VA MRS program.*
- o *Cooperative Studies Program: Currently, this program supports 29 clinical trials. These studies, unique to the VA, provide a mechanism in which research on the effectiveness of diagnostic or therapeutic techniques can achieve statistically significant results by pooling data on patients from a number of VA hospitals. Many landmark clinical trials in the cardiovascular field have been supported under this program, including studies in hypertension treatment and coronary artery bypass surgery. Under the President's budget, this mechanism would receive a 3.09 decrease.*
- o *Career Development Awards: This program supports approximately 250 clinical scientists who spend the majority of their efforts on medical research. Under this highly competitive program only 35-40 percent of the approved applications can be funded. The President's budget proposes to decrease career development awards by 6.88 percent and 11 FTE. If this budget were enacted, in FY 1991, an estimated 75 programs would be completed without replacements.*

Examples of cardiovascular research funded by the VA follow.

- o *Study on how the short-term control of coronary vascular tone is mediated. Comprehension of this process will clarify alterations of blood flow that occur in abnormal states within the heart.*
- o *Research on the changes in the secretion of the hormone atrial natriuretic factor (ANF) in experimental heart failure. The goal of this study is to develop information about short and long-term hormonally mediated compensation during heart failure.*
- o *Probe of the ability of the nervous system to control cardiac activity. This investigation will provide information about changes in blood vessel control as blood pressure fluctuates.*
- o *Evaluation of the effects of calcium channel blocker drugs on platelet clumping. Calcium channel blockers stimulate platelet clumping at low concentrations and inhibit this activity at high concentrations. These findings will help to clarify the value of these newer pharmacological agents in the treatment of cardiovascular disease.*
- o *Investigation of cardiac muscle hypertrophy (increased muscle mass). A complete understanding of this process could eventually lead to new therapies for cardiac muscle loss.*

The VA cardiovascular research is largely clinical in nature. In fact, the VA is a major contributor to this Nation's clinical research. Thus, the VA assumes a unique role in the research community because of its ability to immediately translate basic research findings into the clinical practice setting.

The President's proposed level of funding for the VA's Medical Research Service program is unacceptable and unrealistic. While the AHA appreciates the need for fiscal restraint, we are concerned about the long-range effects on this Nation's health if biomedical research funds are cut in FY 1991. Therefore, for the VA's Medical Research Service program, the AHA recommends a FY 1991 appropriation of
$219 million, an increase of 20.5 percent over the FY 1990 level for the biomedical research

activities of the VA. An appropriation of $219 million would only restore the MRS program to its FY 1985 level of effort. Our funding recommendation for the VA MRS program is consistent with that of the "Friends of VA Medical Care and Health Research."

Specifically, an appropriation of $219 million for the VA MRS program would support 26 cooperative studies and 1,840 projects, leaving many promising approved research grant applications unfunded. These figures represent the same numbers funded in FY 1985. The AHA-recommended appropriation also would fund 240 career development awards, 13 more than were supported in FY 1985.

The American Heart Association (AHA) firmly believes that today's investment in biomedical research will lead to future returns--further decreases in death rates from heart attack and stroke, reduced federal outlays for hospital and long-term care expenses, a well-trained cadre of biomedical researchers, and a more healthy and productive society. A 20.5 percent increase in funds for VA research would continue current cardiovascular research momentum and help to maintain the VA's vital role in the overall scientific effort in this field.

Thank you for this opportunity to appear before your Subcommittee and I will be happy to answer any questions.

Senator MIKULSKI. Dr. Farrar of the Digestive Disease National Coalition, is he here?

[No response.]

VETERANS AFFAIRS/NATIONAL SCIENCE FOUNDATION/NATIONAL AERONAUTICS AND SPACE ADMINISTRATION/ENVIRONMENTAL PROTECTION AGENCY

STATEMENT OF WILLIAM L. DEWEY, Ph.D., PRESIDENT, FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY

Senator MIKULSKI. Mr. Dewey of the Federation of American Societies for Experimental Biology.

BASIC RESEARCH

Dr. DEWEY. Thank you, Madam Chair. I am Bill Dewey, the president of the Federation of American Societies for Experimental Biology. I want to thank you for the opportunity to testify this morning.

Our 30,000 scientist members are very concerned about the basic research in general and, in particular, the education of young scientists. And for these reasons, I'd like to speak to you about the various agencies that are under the purview of your committee.

PREDOCTORAL TRAINING PROGRAM

First, the National Science Foundation: We are very concerned about the loss of faculty members over the next 10 to 15 years and we'd like to applaud the National Science Foundation and encourage you to continue to support the predoctoral training program of scientists coming into the field. We are convinced that basic research is the need for this country, both in medicine and in other areas to keep up our competitiveness across the world. And we think this is essential at this time that this be continued.

GREC PROGRAM

In terms of the Veterans Affairs, we feel also that the research done by the Veterans Affairs is essential to all aspects of the society and we encourage you to support the Veterans Affairs. We recommend $219 million for the biomedical component of the Veterans Affairs budget. We'd like to point out particularly the GREC program of the Veterans Affairs we think is essential.

Senator **Mikulski**. I couldn't hear what you said because of the bell. I'm going to ask you to repeat that, but wait until the bells stop. And would you pull the microphone closer.

Dr. **Dewey**. What I was commenting on, Madam Chair, was the GREC program of the Veterans Administration, which we think is essential for the advancement of health for these citizens but also will be very worthwhile for all citizens, and we think it's an essential way for advances in basic research for the citizens of our country.

LIFE SCIENCES

In terms of NASA, we think it's absolutely necessary that more basic research be done as we plan to send people further in space and as we plan to send people into space for longer periods of time. And we suggest that you support $163 million for the Life Sciences branch of NASA, which the administration has suggested.

In terms of the Environmental Protection Agency, basic research here is very important, both from the point of view of biotechnology and from the point of view of determining safety levels for things like water, air, and other things that all our citizens are exposed to.

So in summary, what we encourage—and first, thank you for your work in the past where you've supported these agencies—and ask you to do it further because of the need for basic research and increase the numbers of people coming into science. It's essential to the people of the United States.

Thank you.

Senator **Mikulski**. Well Dr. Dewey, you presented testimony, I know for the experimental biology organization. Your corporate members are the Physiological Society, Biochemistry, Nutrition, Pathology, Immunology. Also, you commented on agencies related to the National Science Foundation, VA, NASA, and EPA.

The reason I note that for the record was that you got a lot into 2 minutes. We know that you particularly, I'm sure, will want to amplify this for your various agencies and please feel free to do so.

Dr. **Dewey**. Thank you.

Senator **Mikulski**. Because we don't want you to think that we're being skimpy.

[The statement follows:]

STATEMENT OF DR. WILLIAM L. DEWEY

My name is Dr. William L. Dewey, and I am Associate Provost and Professor of the Department of Research and Graduate Affairs and Pharmacology at Virginia Commonwealth University. I am also President of the Federation of American Societies for Experimental Biology. It is in that capacity that I am here today testifying in support of basic biological and medical research funded by the National Science Foundation, the Department of Veterans Affairs, the National Aeronautics and Space Administration, and the Environmental Protection Agency.

I am appearing before you on behalf of the 30,000 scientist-members of seven Societies that comprise the Federation of American Societies for Experimental Biology. The Federation is a nonprofit organization whose purpose is to disseminate new knowledge in the life sciences through its meetings, publications, and programs. The members of the Federation conduct research on the cutting edge of the life sciences. They also help to train the next generation of scientists.

Basic research is crucial to progress in the life sciences. Basic research pays off in unpredictable ways and at unexpected times. Research on an interesting problem that presently has no known relevance to disease may turn out to play a crucial role in resolving an entirely different problem. One outstanding example of that process is the development of biotechnology.

We need to nurture a broad platform of basic research to help us solve not only the problems we face today, but also to be prepared to face new challenges we cannot yet foresee. Research on retroviruses was begun long before the AIDS virus was discovered, but the foundation of that research was essential to our ability to identify the cause of the disease and to begin dealing with its consequences.

Each agency within the jurisdiction of this subcommittee has its own unique mission and its own particular research responsibilities. The Federation urges you to provide the maximum possible support for all biological sciences research in those agencies.

NATIONAL SCIENCE FOUNDATION: We in the scientific community are grateful for all that you and your Subcommittee did last year to provide the best possible funding for NSF in a difficult fiscal climate. The administration and the Congress are on record as favoring a doubling of the National Science Foundation Budget between FYs 1989 and 1993, a goal that the Federation certainly supports. For FY 1991, however, the administration has requested only $2.4 billion, rather than the authorized level of $2.8 billion. We urge you to do your best again this year to provide NSF with the maximum possible support.

NSF provides important research funding in the life sciences through its Biological, Behavioral and Social Sciences Directorate. For FY 1991, the administration has requested $328 million for BBS, which is an increase of $34 million or 11.6% over the FY 1990 appropriation. Among the projects BBS would like to begin next year is to map and sequence the genome of the plant Arabidopsis. BBS hopes to spend $4.47 million next year on this project, which will involve scientists from several disciplines and funding from various federal agencies. Mapping and sequencing the relatively simple genome of Arabidopsis will aid in developing techniques to be applied to mapping and sequencing the genomes of more complex organisms. BBS also plans to provide $1.5 million to support the development and standardization of databases that can readily be shared across the breadth of the biological sciences.

Science education is an area of intense interest because of its potential impact on our future. It is widely accepted that science education in this country must be improved or else there will not be enough well-trained scientific personnel as the U.S. enters the 21st century. Strategies for dealing with the dearth of qualified American scientists must start with programs to provide excellent science education in elementary and secondary schools, but there must also be programs to assist and encourage these students to pursue their scientific studies and to enter careers in the field.

For FY 1991, NSF proposes to spend $251 million on programs within the Science and Engineering Education Directorate. NSF also proposes to spend an additional $212 million for other educational activities within the research directorates and for related activities, such as providing awards to new investigators. The Federation endorses these science education efforts and recommends that they be continued.

Several of the Federation's member Societies believe that one key to producing the next generation of scientists is to communicate the excitement of science is to students before they get to university. To this end, several of our member Societies have developed their own programs to give high school biology teachers a summer experience in a research laboratory. The teachers' glowing reports demonstrate without a doubt that exposure to research is an important element in science education.

DEPARTMENT OF VETERANS' AFFAIRS MEDICAL RESEARCH: Once again, the Administration is proposing unacceptable cuts in DVA Medical and Prosthetic Research. This program funds medical research into the diagnosis and treatment of a broad range of diseases of particular relevance to veterans, such as heart attack, stroke, hypertension, circulatory disorders, cancer, lung diseases, immune system disorders, Alzheimer's, medical problems of the elderly, drug and alcohol dependence, spinal cord and head injuries, and neurological disorders.

The administration proposes to decrease the DVA budget for health research by $14 million in FY 1991 to $199 million. The Federation strongly opposes this unwise proposal. We concur with the recommendation of the "Friends of VA Medical Care and Health Research" that the DVA spend $219 million on the biomedical research component plus $15.5 million for special research projects in FY 1991. The increase for biomedical research will enable the DVA to fund more of the meritorious research grants approved by its scientific review panels and will improve its ability to recruit and retain qualified medical researchers. The special research initiatives include projects involving AIDS, mental illness, and nerve regeneration. An active DVA research program assures veterans that the highest quality health care will be available to them. Also, since the health problems DVA researchers investigate do not affect veterans alone, the discoveries made through DVA-sponsored research ultimately benefit everyone.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION: The FY 1991 budget requests $163 million for NASA's Life Sciences Division, an increase of $57 million over its FY 1990 appropriation. The Federation supports this request. The Life Sciences Division has as its missions to meet human needs in the exploration of space and to conduct basic research. The former involves building up a scientific and technological foundation for the development of medical and biological systems needed for exploration and habitation of space. The second aspect of the program involves study of the origin, evolution, and adaptation of all life forms.

Last summer President Bush called on the U.S. to commit itself to exploring the solar system and establishing permanent settlements in space. Life sciences research will be a critical factor in the success of U.S. plans to build Space Station Freedom, establish a permanent base on the moon, and journey to Mars. The Biomedical Monitoring and Countermeasures (BMAC) program is one example of the activities intended to assure crew health and safety during extended missions in space. Among the issues to be explored are the effects of microgravity on human development, metabolism, and physiology, including bone demineralization, muscle atrophy, and cardiovascular deconditioning. However, this and all NASA life sciences research has implications for expanding our understanding of disease processes that affect all of us here on earth.

ENVIRONMENTAL PROTECTION AGENCY: Concerning the EPA, it seems that the agency is of two minds with respect to biotechnology: Some parts of the EPA regard biotechnology as an environmental hazard, while other parts recognize the enormous potential it offers for environmental cleanup. The Federation is concerned that so little money is provided at present for research into how microbes can be used to attack environmental pollution problems. We therefore urge that EPA devote more of its resources to programs using biotechnology as part of the solution to environmental cleanup.

In sum, Mr. Chairman and Members of the Subcommittee, the Federation again wishes to note with gratitude the efforts you have made in the past and to urge your support for the funding levels we have recommended for life sciences research at NSF, DVA, NASA and EPA.

Senator **Mikulski**. The Chair wants to note that Senator Bob Kerrey is here. I'm going to take one more witness and then I have to leave for a VA meeting on some pressing issues and he'll continue to chair it.

Is Dr. John Lipkin here?

Dr. Lipkin, we know that you're the chief of staff for Perry Point VA Hospital, but you're here not in that hat, but representing the American Psychiatric Association.

Dr. **Lipkin**. That's correct.

Senator **Mikulski**. But we appreciate that.

The Chair also notes the arrival of a really conscientious member of our committee, Senator Grassley of Iowa.

Dr. Lipkin.

STATEMENT OF JOHN LIPKIN, M.D., ON BEHALF OF THE AMERICAN PSYCHIATRIC ASSOCIATION

Dr. **Lipkin**. Good morning. I was here last year and I'd like to be able to tell you that things have gotten a lot better for us, but I don't think I can do that.

I want to point out that——

Senator **Mikulski**. They're quite distracting but also informative for us. It's not an air raid drill, Gorbachev hasn't defected, they've just got a quorum call. Go ahead, Doctor.

PSYCHIATRIC CARE FOR VETERANS

Dr. **Lipkin**. I want to point out that about 50 percent of all the veterans in the United States who receive psychiatric care receive it from the VA. Which means that the VA is an essential provider of those services to Americans.

Facing American psychiatry and facing the VA in particular is a major recruiting and retention problem. The APA has joined with the VA to be seeking support for changes in the pay bill, which I know you're working toward, to enable us to recruit adequately the kinds of high quality psychiatry personnel that we need to have.

One of the fundamental parts of any recruitment, particularly in affiliated settings, is the provision of research support. And, as my colleagues have said and as the Friends of the VA are pointing out, the research budget across the board in the VA has withered in the past in real dollars and needs your support in order to return to the levels which will allow us to make progress in psychiatry and recruit the kinds of physicans we need.

Finally, I would point out that the national Vietnam veterans readjustment survey, which is the best epidemiological work on the topic ever done, indicates that 15 percent of Vietnam combat veterans are still having serious difficulty with posttraumatic stress disorder and that is a major problem for which additional support is needed.

Before you leave, I'd also like to thank you on behalf of the hospital for your support for our clinic addition building and hope that we can have you up to see some progress in that area as it occurs.

Thank you.

Senator **Mikulski**. Thank you, Doctor. And I'd love to come up.

Dr. **Dewey**. We'd be happy to arrange a time.

[The statement follows:]

STATEMENT OF DR. JOHN LIPKIN

Madame Chair and Members of the Committee, I am John Lipkin, M.D., Chief of Staff, Perry Point, Maryland VA Medical Center and Clinical Associate Professor of Psychiatry, University of Maryland. I am pleased to appear before you today on behalf of the American Psychiatric Association, a medical specialty society representing over 36,000 psychiatrists nationwide, to represent our views and share our concerns regarding the FY 1991 appropriation for the Department of Veterans Affairs Medical and Health Research programs.

The APA, a member of the "Friends of VA Medical Care and Health Research Coalition," concurs with their FY 1991 funding recommendations of $13 billion for medical care and $268 million for health research, and endorses the Independent Budget recommendation, compiled by Veteran Service Organizations, for VA medical care. As you know, underfunding has been a chronic problem in the VA. If quality care is to be delivered and unmet needs are to be addressed, the FY 1991 budget must be based on current services dollar amounts. To provide the same level of services in FY 1991 as FY 1988, a medical care budget increase of $1.6 billion over the FY 1990 appropriation is required. As physicians and spokespersons for those who too often cannot speak for themselves, we hope to provide you with a greater understanding of how critical delivery of psychiatric care is to veterans and how inadequate funding levels continue to place mentally ill veterans at risk.

Since the implementation of the Resource Allocation Methodology (RAM), VA psychiatry has experienced a 21% increase in episodes of care and a 13% increase in the number of unique individuals treated. In 1988, the percentage of discharges for individuals suffering dual diagnosis conditions involving a serious psychiatric disorder and an alcohol or substance abuse disorder was 89%. Yet, despite the increased census and an evidenced need for more complex treatment with a higher level of care, the proportion of VA funds distributed to psychiatry bed sections has declined. The VA must reaffirm its mission to provide comprehensive psychiatric services to veteran patients who suffer from service-connected illness including: schizophrenia, post-traumatic-stress disorder (PTSD), Alzheimer's disease and other dementia, alcoholism and other substance abuse disorders, and depression. In addition, the time to address the tremendous unmet needs of veterans suffering from mental illness is long overdue. The following items represent what we consider critical areas of need for increased funding in the medical care and medical research programs.

RECRUITMENT RETENTION OF VA PSYCHIATRISTS

The VA is now facing a crisis in health care delivery by psychiatric physicians. The National Association of VA Chiefs of Psychiatry recently completed their own recruitment and retention survey of VAMCs. The report determined an overall vacancy rate of 19.09% and turnover rates exceed 16% per year. Over 70% of Chiefs of Psychiatry responding indicated that the quality of care provided to their patients has deteriorated.

The President's budget request contains $38.6 million in additional funds for physician and dental pay enhancement. We support the House Veterans' Affairs Committee's budget recommendation to add $30 million to the Administration's proposal for this purpose. This total appropriation of almost $70 million would fully fund H.R. 4557, recently passed legislation introduced by Congressman Montgomery, which would improve the capability of the Department of Veterans Affairs to recruit and retain physicians, dentists and nurses through increases in special pay authorities.

This legislation would finally provide for implementation of a compensation system recognizing physician longevity and specialty. However, if the legislation is not fully funded with new monies, much of the cost would have to be absorbed by VA medical facilities. These facilities would not be able to recognize any benefit from this pending legislation and their recruitment and retention problems would only worsen. In addition, the Department has never utilized its authority to designate psychiatry as a scarce specialty, and therefore, we request that report language be included in the appropriations legislation which recommends that the Secretary specifically address the shortage of VA psychiatrists.

The importance of providing fully-staffed, well-trained psychiatric units in VAMCs across the country cannot be overemphasized. Scientific advances have served to increase the relationship between physical and mental health, increasing the danger inherent in misdiagnosis. Psychiatric patients in VA facilities suffer a high incidence of co-morbidity and physical causes of mental disorders. A proper understanding of the diagnostic and treatment considerations that affect them is essential.

As you are aware, the Department of Defense is currently evaluating the possibility of establishing a demonstration program designed to train psychologists to prescribe psychotropic medications. The shortage of psychiatrists is a dangerous rationale for any substitution of medical education and residency training particularly in order to allow non-physician psychologists to prescribe medication. No state allows a psychologist to prescribe medication. We strongly urge against any proposal supporting or endorsing such a plan for the VA. The recent NAVACOP survey indicates psychiatrists are currently coping by temporarily employing physician extenders. Psychiatric physicians are the only health care providers who have sufficient knowledge and skill to address physical and mental evaluation, differential diagnosis and treatment planning, the knowledge and management of drug side effects and drug interaction, and the role of medication in the bio-psychosocial continuum framework of care.

MENTAL ILLNESS RESEARCH

It is no secret that the funding level for psychiatric research in the VA is vastly disproportionate to the utilization of psychiatric services. In FY 1988 psychiatrists received ten of 287 Career Development Awards funded. The President's proposed budget cut of $14 million would severely impair all research efforts in the VA and further restrict research on the mental illnesses that affect 40% of our veterans.

We support the Friends of the VA funding recommendation of $268 million and once again request that the VA create a Mental Illness Research Service similar to research expressly mentioned in the statutory provision, section 4101(c), which establishes the VA's research mission. We believe that the creation of such a Service with its own budgetary allocation would help to pursue more creative and cost-effective innovative treatment for veterans with mental illness.

In addition, the APA wishes to express its support for the creation of Mental Illness Research, Education, and Clinical Centers (MIRECCs), which we believe will impact strongly upon the quality of care and the ability to attract and retain qualified personnel by permitting opportunity for professional growth.
It is a modest investment to make when one considers the monumental possibilities for improving care and treatment of veterans. We request initial funding of $3.125 million for the establishment of five MIRECCs.

GERIATRIC PSYCHIATRY

Perhaps one of the most significant health problems facing the country, and particularly the VA, is that of the elderly's mental health care needs. In November of 1989, the American Board of Medical Specialties approved the establishment of a formal certificate of added qualification in Geriatric Psychiatry, thus allowing the American Board of Psychiatry and Neurology to prepare an examination for added qualification in geriatric psychiatry. With the growth of the elderly population and the specialized problems associated with geriatric patients, geriatric psychiatrists serve multi-faceted roles of consultant, diagnostician and clinician to elderly patients suffering from organic as well as other mental disorders.

By the year 2000, there will be 9 million men over the age of 65. Two of every three will be veterans. In 1988, 7% of all VA hospital discharges were elderly veterans with a primary psychiatric diagnosis, and an additional 20% of hospital discharges were elderly veterans with a secondary psychiatric diagnosis. We suggest that the effort to provide care to the elderly veteran be expanded to increase the number of Geriatric Research, Education, and Clinical Centers (GRECCs) from 12 to 17, as recommended in the Independent Budget. We also request that funding be provided for 25 additional geriatric fellowships in geriatric medicine, particularly for psychiatry, in an effort to address the evidenced mental health needs of this specific population.

POST-TRAUMATIC STRESS DISORDER (PTSD)

The National Vietnam Veteran's Readjustment Study (NVVRS), has determined that 15.2% (480,000) of all male Vietnam theater veterans currently have (PTSD). Despite this, the NVVRS data show that approximately 90% of the estimated 480,000 veterans with current PTSD have never used VA mental health resources. Yet, the Administration's proposed budget contains no increase in funding for PTSD treatment activities. The VA's existing inpatient PTSD units continue to be routinely plagued by long waiting lists -- as long as two years, and the distribution of specialized resources is uneven. For these reasons, we concur with the Senate Veterans' Affairs Committee recommendation that increased funding of $12.4 million be distributed for 25 new PTSD clinical treatment teams; 3 new inpatient PTSD units the National Center on PTSD, for treatment, education and research activities; and augmentation of existing inpatient PTSD units to decrease waiting lists.

HOMELESS CHRONICALLY MENTALLY ILL VETERANS

We are all aware of the staggering number of homeless in this country. Of the estimated 750,000 to three million living in streets or shelters, it is estimated that between 18% and 51% are veterans. The VA's Homeless Chronically Mentally Ill (HCMI) program has served 19,661 veterans in 43 metropolitan areas in its two years of operation. These veterans represent some of the most severely ill. The second Annual Report revealed that 97% of those assessed were diagnosed with a psychiatric disorder. Many suffered with dual diagnoses. The House Veterans' Affairs Committee budget recommendation notes that the funding level provided in the McKinney Act amendments for VA homeless activities is $30 million. We request that these funds be included in the appropriation for VA homeless activities in an effort to address the inadequate staffing levels and expand the program.

AIDS AND AIDS RELATED COMPLEX (ARC)

The VA caseload for AIDS and AIDS Related Complex represents about seven percent of the nation's total caseload. The Veteran's Health Service & Research Administration (VHSRA) expects 4,260 new inpatients in FY 1991 and 3,300 readmissions from previous years. In addition, the VA will follow 7,500 outpatients. The real costs of AIDS treatment to the VA are $130.8 million in FY 1989, of which only $223 million is funded, and in FY 1990 the costs are projected to be $164.9 million with approximately $80 million to be absorbed in the VA budget. We concur with the Independent Budget recommendation for no less than a $60 million increment in the FY 1991 budget.

Senator **Mikulski**. We're now going to ask Senator Bob Kerrey to assume the chairmanship so I can get over and try to get a good deal for veterans. I'm doing a bit of shuttle diplomacy today.

Senator Kerrey, would you take the Chair and continue with this excellent group of witnesses?

Thank you.

STATEMENT OF DR. JOHN FARRAR, PRESIDENT, DIGESTIVE DISEASE NATIONAL COALITION, AMERICAN GASTROENTEROLOGICAL ASSOCIATION

Senator **Kerrey** [presiding]. Dr. Farrar, Dr. John Farrar of the Digestive Disease National Coalition?

FUNDING FOR RESEARCH

Dr. **Farrar**. Thank you very much, Senator Kerrey. My name is John Farrar and I am a physician and a professor of medicine at the Medical College of Virginia. I'm also the chief of staff at the VA Medical Center in Richmond, VA. It is my pleasure today to testify on behalf of the American Gastroenterological Association, the AGA, and the Digestive Disease National Coalition to discuss fiscal year 1991 funding for the VA research.

I want to assure you, Senator Kerrey, that I am testifying as an individual, not as a member of the VA. I am here on annual leave and I drove my own car.

The VA research program continues to focus primarily on diseases and disabilities that most commonly affect veterans. Many recent accomplishments have improved the care given to veterans and in some cases substantially reduced VA costs.

Unfortunately, despite its many marks of success, the research program has undergone severe funding constraints in recent years and research opportunities have been drastically reduced.

In 1985, the VA funded 722 merit review awards; this year, it will fund only 539. More importantly, the percentage of approved projects has dropped from 80 percent in 1985 to 45 percent in 1990.

HIGH-QUALITY PHYSICIANS NEEDED

An inadequately funded research program also hinders the VA's ability to attract and retain high-quality physicians to provide care to veterans. Physician researchers come to the VA largely because of the opportunity to do research and to teach. This is very distressing to me because we're losing our best people. We can't attract M.D.'s with money but we can by appealing to the best in a person. Altruism, love of teaching, and the opportunity to pursue an idea; that's what has brought some of the best physicians into the affiliated VA programs.

As a first step toward addressing these concerns, the AGA supports the Friends of the VA Medical Care and Health Research in recommending a VA budget of $268 million.

I think this is extremely important for us to be able to not only attract but to keep the best of physicians. In Richmond, VA, if I can have a person from the university half-time, I can bring him to the VA and I can give him a lab and have a reasonable chance of getting a research project—to be turned on by an idea—I'll have, if you'll pardon me everybody, I don't want to offend anybody, but I'll have his secular soul: he's with me at the VA, he's working for the veteran, he's also turning out good research.

Thank you very much for the opportunity to speak to you. I send you regards as of yesterday about noon—day before yesterday at noon from Mike Sorrell, who said that—and he and I are close friends, he's a marvelous liver man and he said he hoped you'd help us.

Thank you.

Senator **Kerrey**. I hope I never need Mike Sorrell's professional services, but he is a very good friend. Thanks for his regards.

Thank you for your testimony, Dr. Farrar.

[The statement follows:]

Statement of Dr. John Farrar

My name in John Farrar and I am the chief of staff at the VA Medical Center in Richmond, Virginia. It is my pleasure to be here today on behalf of the American Gastroenterological Association (AGA) and the Digestive Disease National Coalition to discuss fiscal year 1991 funding for the VA research program.

The American Gastroenterological Association is an organization of 6,300 physicians specializing in the treatment of digestive diseases. Its members are dedicated to fostering progress in patient care, research, teaching, and continuing education in the field of gastroenterology. The DDNC is comprised of 22 national medical and voluntary organizations that are concerned with various digestive diseases. The VA research program is of special importance to the AGA and the DDNC, as it provides support for research aimed at improving the medical care of veterans including the thousands who suffer from digestive disorders.

The VA research program continues to focus primarily on the diseases and disabilities that most commonly afflict veterans. Many recent accomplishments have improved the care given to veterans and in some cases substantially reduced VA medical costs.

A recent VA-sponsored study found the hormone that allows the damaged liver to repair itself. This discovery holds tremendous promise for treating the 60,000 veterans who are diagnosed with liver disorders each year and the over 50,000 Americans who die annually of liver failure.

As reported last month in the New York Times, a VA-sponsored study identified the bacteria that often causes chronic stomach ulcers. This discovery has led to dramatic new treatments for ulcer disease, which afflicts over 30,000 veterans each year.

The discovery made by a VA researcher of a tiny parasite that is believed to cause many cases of a mysterious wasting illness in AIDS patients could uncover valuable treatments for this severe complication of the disease.

Findings from a VA-sponsored study have led to more effective and less costly procedures for colon surgery. Based on an estimated 8,000 such surgeries performed each year, the VA will save $1 million in 1990 using these new techniques.

Unfortunately, despite its many marks of success, the research program has undergone severe funding constraints in recent years, and research opportunities have been drastically reduced. In 1985, the VA funded 722 merit review awards, but this year it will fund only 539 projects. Furthermore, the percentage of approved projects that receive funding has dropped dramatically—from 80 percent in 1985 to 45 percent in 1990. With such a large portion of high-quality research proposals unfunded, the VA is missing some important opportunities. In the area of digestive diseases alone, last year the VA was forced to deny funding for the following meritorious projects: a study at the Ann Arbor, Michigan VA on stomach disorders; research at the Decatur, Georgia VA focused on alcohol cirrhosis; a study at the Sepulveda, California VA on the causes and preventions of ulcers, and; an investigation at the Brooklyn, New York VA on intestinal dysfunction.

Such studies hold tremendous promise for improving medical care provided to veterans and the population at large. The VA's inability to fund them is most disturbing to me both as a scientist and as a physician who has seen many patients still suffering with these conditions.

An inadequately-funded research program also hinders the VA's ability to attract and retain high-quality physicians to provide care to veterans. Physician-researchers come to the VA largely because of the opportunity to conduct research. Unfortunately, recent funding constraints have made recruitment and retention of good doctors increasingly difficult. At my own hospital in Richmond and at other VAMC's across the country, we have begun to see many of our most talented physicians opt to pursue their careers outside the VA. In addition, it has become increasingly difficult to recruit young doctors to enter the system. This is particularly distressing to me because as these physicians leave, veterans are denied the benefit of their skill and expertise as physicians and scientists.

As a first step toward addressing these concerns, the AGA supports the Friends of the VA Medical Care and Health Research in recommending an fiscal year 1991 VA research budget of $268 million. Of this amount, $252.5 million will restore the program to its level of effort in terms of projects, cooperative studies, and career development awards. In addition, $15.5 million will fund a limited number of special research initiatives to address health problems of particular concern to veterans including AIDS, nerve regeneration, geriatric medicine, and mental disorders.

The AGA believes that a budget of $268 million is necessary in order to restore the VA research program which serves the hospital system in so many ways. An adequately-funded research program enhances the quality of health services provided to veterans and allows them to receive the latest medical treatments. It enables the VA to recruit and retain outstanding physicians. Frequently, the program yields information on new health care strategies that actually reduce VA medical costs. For these reasons, we hope that this Subcommittee will carefully consider any request for increased funding for this vital program.

Thank you for considering the views of the American Gastroenterological Association and the Digestive Disease National Coalition. I would be happy to answer any questions.

STATEMENT OF DR. ROBERT RATNER, ON BEHALF OF THE AMERICAN DIABETES ASSOCIATION

Senator **Kerrey**. The next witness is Christopher Saudek of the American Diabetes Association.

Dr. **Ratner**. Mr. Chairman, I am not Christopher Saudek, I'm Dr. Robert Ratner from the George Washington University Medical School sitting in for Dr. Saudek. We certainly did not want to leave this committee without a representative from the American Diabetes Association.

The ADA, the Diabetes Association, is the Nation's largest voluntary health agency serving the health care and medical research interests of nearly 12 million individuals with diabetes.

DIABETES PREVALENT PROBLEM

The incidence of diabetes increases with age and has become an especially prevalent problem among VA patients. In 1986 alone, diabetes accounted for almost 150,000 diagnoses within the veterans system and we anticipate a substantial increase as our veteran population ages.

DIABETES EDUCATION AND CARE CENTERS

In 1987, the VA Diabetes Advisory Group recommended that VA diabetes education and care centers be established. These centers would provide a structure for the application of the latest in diabetes care, education, and clinical research.

The ADA recommends an additional appropriation of $2.5 million in fiscal year 1991 for first year funding of seven such centers. The ADA has long recognized that dedicated diabetes education and care may result in improved patient outcome with cost savings resulting from reduction in frequency and duration of hospital stays and reduction of rate of lower limb amputations.

The Medical Research Program, as my colleagues have just discussed, augments, and bolsters the quality of health care provided to America's veterans, as well as the population at large.

VA medical research has a well-founded reputation for uncompromising excellence, as exemplified by the Nobel Prize for insulin research received by Dr. Roslyn Yalow from the Bronx VA Medical Center. It's vital to restore and maintain stable funding for this research program. Adequate funding will facilitate research to improve the quality of care provided to Americans at large and to veterans in particular.

COOPERATIVE STUDY

One project of particular interest is the VA cooperative study examining the control of blood glucose and complications in noninsulin-dependent diabetes. We believe this and other studies would provide critical information in our search for better treatments and ultimately a cure for this disease.

To help restore the VA medical research programs, the ADA joins the Friends of the VA in urging Congress to appropriate a total of $268 million.

Overall, we again join the Friends of the VA in supporting an appropriation for VA medical care programs of $14.4 billion for fiscal year 1991. This recommended funding level would enable the VA to adequately meet personnel costs as well as begin to restore programs previously damaged by cost shifting.

In conclusion, there is undisputed evidence that veterans, people with diabetes, and the American public in general receive tremendous benefits from the VA medical care and medical research programs. We applaud this subcommittee for consistently recognizing this fact and urge continued support for the important research in health care activities of the Veterans Administration.

Thank you, sir.

Senator **Kerrey**. Thank you, very much.

[The statement follows:]

STATEMENT OF CHRISTOPHER SAUDEK, M.D.

Mr. Chairman, I am Christopher Saudek, M.D., Associate Professor of Medicine in the Division of Endocrinology at Johns Hopkins University and a long-time volunteer and former Chair of the Government Relations Committee for the American Diabetes Association (ADA).

The Association is the nation's largest voluntary health agency serving the health-care and medical research interests of nearly 12 million individuals with diabetes. The ADA is comprised of 56 state affiliate associations, 800 local chapters, and over 220,000 lay and professional members. It is a pleasure to have this opportunity to testify before you today on behalf of the Veterans Administration (VA) research and health-care budgets.

Diabetes is a disease in which the body does not produce or respond to insulin, a hormone needed for daily life. There are essentially two types of diabetes. Type I, or insulin-dependent diabetes, affects about 1 million people in the United States and usually strikes children or adolescents. This type of diabetes results from the complete destruction of the insulin-producing cells in the pancreas and requires one or more daily injections of insulin to sustain life. Type II, or non-insulin-dependent diabetes, affects approximately 11 million people in the United States and usually occurs in adults over the age of 40. This type of diabetes may or may not require insulin for treatment.

VA SYSTEM AND ITS CONTRIBUTION TO DIABETES HEALTH CARE AND RESEARCH

Diabetes is a particular problem among the veteran population and is especially prevalent among VA patients. The ADA has long recognized the uniquely valuable ability of the VA to coordinate diabetes research on a diverse array of patients at numerous sites around the country. With their patient populations and their research and training programs, VA facilities are in a unique position to make significant contributions toward the improvement of care for individuals with diabetes. In 1986 alone, diabetes accounted for almost 150,000 diagnoses within the VA system. Over the next 10 to 20 years it is projected that another 16 million veterans will be at risk.

The VA is at the forefront in attempting to translate the latest advances in medical research to improve care of patients with diabetes. Roslyn Yalow, M.D., Chief of Nuclear Medicine at the Bronx VA Medical Center, received a Nobel Prize for her work in developing techniques in insulin immunoassay, which represents a tremendous breakthrough in understanding the process by which cells secrete insulin.

The ADA has, for a number of years, maintained a close and successful working relationship with the VA; in fact, a significant number of ADA's volunteer leaders work at VA Medical Centers or are principal investigators in VA research grants nationwide.

MEDICAL AND PROSTHETIC RESEARCH

The medical research programs conducted by the VA augment and bolster the quality of health care provided to America's veterans. VA medical research has a well-founded reputation for uncompromising excellence in meeting the health-care needs of veterans and the general population alike. All Americans stand to benefit from new treatment approaches and delivery modalities developed by VA investigators. It is vital to restore and maintain stable funding for the research program at the VA. Adequate funding will allow research to continue to improve the quality of care provided not only to veterans but to all Americans.

In particular, the VA is conducting some very important research in the area of diabetes. We are particularly supportive of the VA Cooperative Study (#344): Glycemic Control and Complications in Non-Insulin-Dependent Diabetes Mellitus. An ancillary study being proposed would utilize implantable insulin pumps in the treatment of insulin-dependent diabetes. We believe both of these studies will provide critical information in our search for better treatments and a cure for diabetes.

To help restore the level of effort in VA medical research programs, the ADA joins the Friends of VA in urging Congress to appropriate a total of $268 million.

H.R. 4390: The bill H.R. 4390 introduced by the House Committee on Veterans Affairs would establish research centers at qualifying medical schools to carry out medical research in areas of interest to the Department of Veterans Affairs. Nine research areas are specified in the bill including the study of diabetes and metabolic diseases. The bill would authorize the sum of $50 million for each of the fiscal years 1991 through 1994.

Although the bill may require some revision before passage, ADA heartily applauds the introduction of this bill by the House Committee on Veterans Affairs. Every American will benefit from expanded research at the VA.

VA MUST CONTINUE AND IMPROVE ITS EFFORTS

Because the great majority of VA patients with diabetes have Type II diabetes, the VA should focus intensely upon research, training, and education programs directed at the Type II patient. Throughout its history, the VA has conducted extensive research, training, and education programs to facilitate more effective diabetes prevention and treatment, as well as a better understanding of the natural history of the disease and the factors associated with its complications.

Intensive diabetes care programs which include a comprehensive educational component result in improved patient care and cost savings, for example, a decrease in the incidence of acute diabetes emergencies, a reduction in the rate of hospitalizations and the length of hospital stays, a decrease in lower extremity amputations, and improvement of the management of diabetes.

In 1987, the VA Diabetes Advisory Group recommended that VA Diabetes Education and Care Centers (VADECC) be established. The VADECC's would stand as a commitment by medical centers to provide a structure for the latest in diabetes care, education, and clinical research. In addition to patient care and education, the VADECC's would act as laboratories for clinical investigation and for developing systems to improve the long-term effectiveness of care for individuals with diabetes.

ADA recommends an additional appropriation of $2.5 million in fiscal year 1991 for first-year funding of seven VADECC's.

MEDICAL CARE

We again join the Friends of VA [1] in supporting an appropriation for VA medical care programs of $13.44 billion for fiscal year 1991. This recommended funding level would enable the VA to adequately meet personnel costs as well as begin to restore programs damaged by cost-shifting.

In conclusion, there is undisputed evidence that veterans, persons with diabetes, and the American public in general have received tremendous benefits from the VA medical care and medical research programs. We applaud the Subcommittee for consistently recognizing this fact and urge its continued support for the important research and health-care activities of the VA.

STATEMENT OF R. JACK POWELL, EXECUTIVE DIRECTOR, PARALYZED VETERANS OF AMERICA

Senator **Kerrey**. I particularly want to thank the next panel for its presentation and for its private effort to get here today. Thank you.

The next panel includes Jack Powell of the Paralyzed Veterans of America, E. Philip Riggin of the National Legislative Commission, Darryl Williams of the Association of American Medical Colleges and Louisiana State University School of Medicine and Dave Gorman of the Disabled American Veterans.

Mr. **Powell**. Good morning, Senator.

Senator **Kerrey**. Good morning.

Jack, we'll start with you.

Mr. **Powell**. We've submitted testimony; with your permission, sir, I'll just summarize briefly.

Senator **Kerrey**. And your full testimony will be made a part of the record.

Mr. **Powell**. Basically the point that we want to get across is the fact that when you talk about AIDS, aging, homeless, long-term

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[1] The Friends of VA Medical Care and Health Research is a diverse coalition of approximately 100 organizations dedicated to maintaining the high quality of the VA medical system. Now in its third year, the Friends of VA offers specific funding recommendations for VA medical care and health research programs.

care, uncompensated care or the poor, the Veterans Administration plays a major role in each of those segments in our country.

If you talk about health care costs, if you talk about medical education, if you talk about the production of allied health personnel and you talk about medical research, the VA plays a major portion of that in our country.

Too often the Veterans Administration health care system, as a system, is not considered as we're attempting to deal with the issues of providing access to health care to some 32 million Americans that we recognize don't have that care.

QUALITY ASSURANCE PROBLEMS

The sad problem is, however, that the VA, a major national resource, as a result of more than a decade of substandard and inadequate funding, has substantial quality assurance problems in the delivery of its health care to veterans today.

The independent budget that we have submitted and join together with a number of other veterans organizations, the Veterans of Foreign Wars, AmVets, the Disabled American Veterans and have sponsored by a number of other organizations, like the nurses' organization of the Veterans Administration and others, American Association of Medical Colleges [AAMC], indicates clearly a need for some $13.4 billion.

One problem we'd like to see not overlooked is the fact that this so-called $1 billion extra in the President's budget is not $1 billion extra, over $900 million of that simply goes to make up for medical pay problems, backlogs that have existed for some period of time.

So we encourage you and urge you, Senator, to do the best that you can and this committee can in providing an appropriate 302(b) appropriation to the subcommittee so that veterans health care and other veterans programs can, for a change, be adequately funded.

Senator KERREY. Thank you; thank you, Jack.

[The statement follows:]

STATEMENT OF R. JACK POWELL

Madam Chairman and Members of the Subcommittee, Paralyzed Veterans of America (PVA) thanks you for inviting us to testify today concerning the fiscal year 1991 appropriation for the Department of Veterans Affairs (DVA). We will focus our comments on proposed fiscal year 1991 funding levels for the DVA as recommended by the President and as recommended in our own Independent Budget.

Before we examine the President's proposed fiscal year 1991 budget for the DVA, we wish to provide the Subcommittee with a brief assessment of where the agency's health care system is today following the supplemental appropriation for fiscal year 1989.

Several months ago, Independent Budget staff conducted a telephone survey of 24 representative VA medical centers. Survey questions were designed to elicit information on any continuing impact of a residual 1989 funding shortfall and the system's ability to handle the projected continuing shortfall in 1990. Every hospital surveyed reported that deficits were still being absorbed by workload cutbacks and use of funds intended for equipment purchase, building maintenance and repair, personnel salaries and contract health care services, such as community nursing homes. In the latter case, facilities cut utilization between 10 percent and 50 percent.

Most hospitals reported: A residual deficit, ranging from $1 to $4 million per hospital, after receiving their share of the belated 1989 supplemental appropriation; multi-million dollar backlogs, ranging in value from $1 to $17 million in needed but unpurchased equipment; between 20 and 50 nurse vacancies per hospital—particularly in intensive care; waiting times of more than three months for certain specialty clinics (some clinics had a six month backlog); projected funding shortfalls in fiscal year 1990 ranging from $40,000 to $50,000 for prosthetic services and equipment (from wheelchairs to leg braces)—even though fiscal year 1989 non-recurring supplemental dollars were invested in prosthetics; and in every hospital surveyed, poor employee morale.

FISCAL YEAR 1990 SUPPLEMENTAL

We appreciate the action of this Subcommittee and the entire Senate in approving a fiscal year 1990 supplemental appropriation for VA health care in the amount of $94 million. The additional funds will be help increase staffing levels and bridge such levels from this year to the next. Current estimates indicate that total year shortfalls are running in excess of $250 million. We therefore urge the Members of this Subcommittee and the full Committee to strongly promote the Senate figures as you proceed in conference on the bill.

ADMINISTRATION'S FISCAL YEAR 1991 BUDGET PROPOSAL

The Administration's request for VA funding represents an approximate 8 percent increase in medical care over this year. In comparison with all other federal health entities, veterans' health services have not received their fair share of federal health dollars to keep up with the rising cost of medical care. For instance, since 1985 Medicare has received a 44 percent increase; Medicaid received a 58 percent increase. Veterans' health care has received only an 18 percent increase. VA research has received 7 percent less during this time. Discounting for inflation entirely, VA funding during this period has actually been decremental. The point we are making is that the proposed 8 percent increase for medical care in fiscal year 1991 is welcome, but it does not solve the problem that we face.

It is important to understand that although the President's fiscal year 1991 budget proposal would increase the requested budget authority by $1.2 billion over the fiscal year 1990 level, $946 of that amount is required to cover increased salary costs, inflation, and the activation of newly completed facilities. Little remains of the $1.2 billion to address the substantial erosion of health care experienced in fiscal year 1989 and fiscal year 1990. And little remains to address the burgeoning medical equipment backlog, the inadequate agency performance in the adjudication of veterans' claims, and the need for nursing home beds within VA. Further, the backlog of prosthetics equipment and supplies, the backlog of VA cemetery equipment, and a host of other significant problems cannot be adequately addressed by the Administration's proposed funding levels which are "better than they were under President Reagan".

The Independent Budget recommends a medical care budget level of $13 billion just to meet current services requirements. Our total recommendation for medical care is $13.4 billion. An explanation of how we derived this figure is contained in the Independent Budget document. We believe our recommendations for fiscal year 1991 are accurate appraisals of what the Department will actually need next year to make up accumulated lost ground and maintain the quality and quantity of health care and benefit delivery.

HEALTH CARE STAFFING

More than 60 percent of direct health care costs are related to personnel expenditures. The Administration's budget calls for 2,837 additional FTEE in fiscal year 1991. However, the budget proposal reveals that 2,098, the vast majority of those FTEE, are requested to staff newly activated facilities, not to augment the existing system where thousands of beds have been closed due to lack of staff, particularly nursing staff. Only half of the remaining 739 additional FTEE are to be allocated to the existing hospital system. The remainder are to be sent to fill needed nursing home positions.

DIRECT PATIENT CARE COSTS AIDS PATIENTS

The President's budget proposal for fiscal year 1991 highlights an additional $50 million for AIDS treatment. However, this represents a shift from other medical care resources, rather than a request for new funding to support the anticipated increased workload to care for patients with AIDS. The Senate Committee on Veterans' Affairs has recommended a $50 million increase for fiscal year 1991 to help cover part of increasing expense in caring for AIDS patients. We strongly support that recommendation.

MEDICAL AND PROSTHETICS RESEARCH

The Administration's fiscal year 1991 proposed budget for medical and prosthetics research will decrease both funding and FTEE for this important program. Reduced by $13 million below the fiscal year 1990 appropriated level, the program will be unable to start many new research projects as well as force cutbacks in commitments to on-going projects. The President's proposal is approximately $55 million less than that recommended in our Independent Budget. We urge you to reject the Administration's figures and restore sufficient funding for this vital program.

DVA CONSTRUCTION

The Administration has requested a total of $694,467,000 in major and minor construction for fiscal year 1991. Given the 86 year replacement cycle on which DVA facilities are operating, this funding level for fiscal year 1991 will be far short of that needed to address the current nationwide requirements for construction and maintenance shortfalls. Changing technologies and demographics will further require modern state-of-the-art facilities. The Independent Budget recommendation of $970,750,000 for this account will be necessary to meet these current and future challenges.

POST-TRAUMATIC STRESS DISORDER [PTSD]

The President's budget request contains no increase in funding for PTSD treatment services for Vietnam Veterans despite the findings of VA's own major study of the Vietnam veteran population which indicated that 479,000 male Vietnam veterans currently have full-blown cases of PTSD. We recommend the addition of $12.4 million in funding for this critical program.

PHYSICIANS AND DENTISTS PAY

The House and Senate Committees on Veterans' Affairs have introduced legislation to provide a long-overdue increase, including special pay rates, for VA physicians, dentists, and nurses. Without immediate action, however, VA could very well face losing a substantial portion of these professionals over the next several years due to existing pay inequities and retirement inducements. Both Committees agree that an additional $30 million will be required to correct the existing problem.

Madam Chairman, PVA greatly appreciates this opportunity to testify today. I would be happy to answer any questions you might have.

STATEMENT OF PHILIP RIGGIN, DIRECTOR, NATIONAL LEGISLATIVE COMMISSION, THE AMERICAN LEGION

Senator **Kerrey**. The next witness is——

Mr. **Riggin**. Senator, I'm Phil Riggin with the American Legion.

Again, we, as Jack indicated, and on behalf of our organization, we're extremely pleased to be here. We have a full statement, of course, and we ask your permission to have that put into the hearing record. I'll just briefly summarize.

INCREASED DEMANDS REFLECTS AGING OF VETERANS

Jack and I did not coordinate our statements, but our messages are exactly the same. The real needs of the Department of Veterans Affairs are certainly increasing on all fronts. Those of us who are in the fray on a day-to-day basis see that. The aging of the veterans population is reflected in increased demand for both acute care as well as long-term health care.

As you're aware, the proposed VA budget set forth by the administration for fiscal year 1991 requests $30.8 billion in budget authority and $30.1 billion in budget outlays. On the surface, this proposal appears to be a substantial increase over fiscal year 1990, but a closer examination tells a different story.

For example, when the medical care proposal is examined, the real dollar increase of $280 million is simply not sufficient to restore essential employment levels, to replenish the inventory of essential medical equipment or to provide a necessary environment to maintain academic excellence between VA and its affiliated medical schools.

In general, Mr. Chairman, from a purely budgetary standpoint, VA medical care, as an example, and other VA services have been a model of fiscal restraint in the past decade: since 1980, the annual allocation of Federal dollars to VA has increased just 38 percent while the total Federal budget has grown 130 percent.

VA MEDICAL CARE NATIONAL RESOURCE

VA, we believe, particularly its medical care delivery system, should be recognized as a national resource. Over the past years, as Jack has just suggested, it's been a major participant in various national campaigns to deal with drug abuse, the AIDS epidemic, diseases affecting the elderly, and the persistent problem of homelessness. In fact, it's probably the only Federal department or agency that's actively engaged in each and every one of these campaigns.

Despite this record, VA has received just a relatively small portion of the billions of total Federal dollars that have been devoted to these respective national campaigns.

We understand as an organization, Mr. Chairman, the difficulty of the budgetary decisions that you and your subcommittee and the full committee faces. We're convinced, however, that you're not, as you seek the greatest return on Federal dollars spent anywhere in the Federal Government, you're not going to find a better bargain than the Department of Veterans Affairs.

We appreciate the opportunity to have testified here today and I'd be happy to answer any questions you may have.

Senator Kerrey. I have no questions. I appreciate both you and Jack presenting your testimony. Thank you.

Mr. Powell. Thank you, Senator.

Senator Kerrey. This subcommittee will stand in recess until noon.

[A brief recess was taken.]

[The statement follows:]

STATEMENT OF PHILIP RIGGIN

Madame Chair and Members of the Subcommittee:

The American Legion appreciates this opportunity to present its views on the Administration's proposed VA budget for FY 1991. We recognize this Subcommittee's longstanding commitment to America's veterans, which is visible in the manner that funding for veterans programs and services has been provided in recent years. So long as the true needs of America's veterans are accurately portrayed, this Subcommittee has complied with increased funding levels to meet those challenges.

Today, the real needs of the Department of Veterans Affairs are increasing on all fronts. The aging of the veteran population is reflected in the increased demand for both acute and extended health care services. Specialty care services, such as treatment for AIDS, substance abuse, Post-Traumatic Stress Disorder, and the implementation of the Homeless Chronically Mental Ill program are all extremely important. In fact, without these VA programs, society's burden would be that much greater.

The three major components of VA, which include the Veterans Health Services and Research Administration (VHS/RA), Veterans Benefits Administration (VBA), and the National Cemetery System (NCS), are experiencing increased workload demands. We believe that these legitimate workload increases must be met with commensurate levels of funding. We also are of the opinion that VA must provide its services in the most efficient, effective, timely, and economical manner possible, while simultaneously maintaining a high quality of care. It is within this overall philosophy that we shall now comment on the proposed FY 1991 budget.

As you are aware, the proposed budget set forth for VA by the Administration for FY 1991, requests $30.8 billion in budget authority and $30.1 billion in budget outlays. The following information provides comparative highlights of the FY 1990 budget and the FY 1991 proposal:

	Difference from FY 1990
Benefit programs - $16.2 billion	+ 938 million
Medical programs - $12.3 billion	+ 901 million
Construction programs - $694 million	+ 145 million
General Operating Expenses - $926 million **(including National Cemetery System)**	+ 23 million

On the surface, the proposed funding level for FY 1991 appears to represent a substantial increase over FY 1990. However, when considering the effect of sequestration under the Gramm-Rudman-Hollings Act on current funding, and the backlogs in delayed purchases of new and replacement equipment in the medical care program and National Cemetery System, it appears there will be little real increase in funds to operate the Department of Veterans Affairs.

For example, the composition of the proposed $901 million increase for VA medical care in FY 1991, includes inflationary and normal payroll increases totaling $685.5 million. There are additional offsets of $64.8 million, including $19.8 million for FY 1990 nonrecurring ADP equipment, $15.2 million in savings ascribed to the new telecommunications system (FTS 2000), $25 million in anticipated procurement savings, and $4.8 million due to other miscellaneous reductions.

The "real dollar" increases, however, only total $280.7 million. This includes $228.1 million for currently scheduled and past due activations, $13.4 million for state home and contract hospital workload increases, $5.4 million for additional real property leases, and $33.8 million to hire additional nursing personnel and begin an assessment of the benefits of eliminating rotating tours for nurses.

When the medical care budget proposal for FY 1991 is closely examined, we do not view "real dollar" increases of $280.7 million as sufficient to begin to restore reduced employment levels, increase the inventory of new and replacement equipment, restore the provision of medical services to the so-called discretionary care veterans, and provide the necessary environment to maintain academic excellence between VA and its affiliated medical schools.

VA-supported medical research programs must be funded at levels sufficient enough to accommodate current technology and increased personnel costs. Historically, VA medical and rehabilitation research efforts have benefited not only veterans, but mankind as a whole. In the area of applied prosthetics research, VA-developed techniques are now the standard throughout most of the world. In order for VA to continue to pioneer advances in all related medical research endeavors, the recent erosion in VA research buying-power, brought about by inflationary pressure and essentially non-adjusted budgets must be restored.

We believe a more appropriate funding level for VA medical care programs for FY 1991 would be in the neighborhood for $13 billion. This would allow the system to begin to reverse the erosion of quality medical care and research endeavors which have long been a hallmark of VA.

A recent VA Capital Facilities Study documented that 69 of 132 VA medical facilities built before 1970 received a fair, poor or failing rating of their physical condition. According to Department officials, these ratings indicate that major construction projects affecting key physical plant systems will be required in the next five years. Additionally, over half of VA's medical facilities are over 30 years old. The American Legion believes both acute and long-term care requirements of the VA medical care system must be met in appropriate physical plant environments. While we view the major construction request of $530 million for FY 1991 to be acceptable, we believe the minor construction account must accommodate the requested amount of $145.6 million and also make provision for the additional conversion of underutilized acute care beds to long-term extended care.

Of equal concern, is the steady erosion of the timely delivery of traditional benefits such as disability compensation and educational assistance. Benefit delivery delays in these programs have grown steadily in recent years. We are convinced that this development is the direct result of continued personnel cuts, principally at VA's network of 58 regional offices, that have systematically reduced the employee level from almost 19,000 in 1978 to the current total of 12,600. Another 266 full time equivalent employee (FTEE) positions are recommended for elimination in the Administration's budget plan for FY 1991. We believe that instead of reducing employment levels, adding FTEE in VBA field operations would be a positive first step toward reducing the consistent and persistent erosion of services witnessed over the past decade.

Budget priorities of VA must include the aging veterans, substance abuse treatment, PTSD and AIDS treatment, research and education, patient environment, and many other worthwhile programs. The benefits delivery system must be funded adequately to ensure timeliness and accuracy in benefit claims processing. Additionally, the medical construction program, the National Cemetery System, and the General Operating Expenses account for personnel and administration must all reflect the true needs and legitimate demands placed on the Department of Veterans Affairs.

From a purely budgetary perspective, VA medical care delivery and other services have been a model of fiscal restraint. Since 1980, the annual allocation of federal funds to VA has increased just 38 percent, while the total federal budgetary obligation has grown by 130 percent. The American Legion will only request an amount of funding for veterans programs which we believe is truly required, no more or no less.

Closer examination reinforces the point that VA's medical care delivery system deserves to be recognized as a national resource. Over the past several years it has been a major participant in various national campaigns to deal with drug abuse, the AIDS epidemic, diseases affecting the elderly and the persistent problem of homelessness. In fact, it is probably the only federal department or agency actively engaged in all of these campaigns. Despite this record, VA has received only a small portion of the total federal funds allocated to address these issues.

The American Legion understands the difficulty of the budgetary decisions facing this Subcommittee. The American Legion is convinced that as you seek the greatest return on expended federal dollars you will not find a better bargain than the Department of Veterans Affairs. We are confident you will provide the assistance necessary to insure that VA has the means by which to fully accomplish its varied missions.

Madame Chair, that concludes our statement.

HEARING PROCEDURE

Senator **Lautenberg** [presiding]. We're happy to have you here. And Senator Mikulski would have been—since she is the chair of this subcommittee, this very important subcommittee, and she personally discussed with me the information that the witnesses today are going to present and regretted very much that she couldn't be here. But she trusts me and she trusts you, so here we are together. And I invite you to give your testimony in the following order: Dr. Williams, Mr. Gorman, Mr. Magill and Dr. Needleman.

And I guess the rules you've probably heard: short statements—we'll take your full statement for the record but the oral statement relatively short, please.

STATEMENT OF DARRYL WILLIAMS, M.D., ON BEHALF OF THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES

OVERTON BROOKS VAMC

Dr. **Williams**. Good afternoon, I'm Dr. Darryl Williams, the dean of the Louisiana State University School of Medicine in Shreveport. On behalf of the university and the Association of American Medical Colleges, the AAMC, I'd like to thank you for the opportunity to testify.

I would like to share with you some observations from the Overton Brooks VAMC, with which LSU School of Medicine in Shreveport is affiliated. Many of my colleagues across the country share similar concerns.

While we in academic medicine often refer to support for research and education, the main underlying message relates to patient care. Simply put: VA hospitals suffer from a lack of resources necessary to provide reasonable quality and sometimes quantity of care to veterans. For the dean of a school of medicine, this represents a serious two-pronged problem: I'm concerned about the care veterans receive and about the setting where students are educated. In my professional opinion, lack of resources threatens to compromise each of these factors.

The VA in Shreveport has served the veteran population in the greater Ark-La-Tex area for the past three decades. In fiscal year 89, our VA had 9,630 admissions, among the highest in the entire VA system, as well as more than 112,000 outpatient visits. Of the veterans served, 98 percent are considered mandatory. Due to budgetary restraints, we are having increasing difficulty in accomplishing our mission of providing medical care to veterans, educating students, and carrying out a clinically relevant research program. Areas of concern range from dollars available to purchase necessary medical equipment, to the ability to recruit and retain professional and technical staff.

LACK OF NURSES, TECHNICAL STAFFING, AND EQUIPMENT

Lack of nurses has caused bed reductions. Lack of sufficient technical staffing has led to delayed diagnostic testing and limited treatment.

Lack of adequate equipment has also severely hampered the medical center. For example, in the absence of stereotactic equipment for neurosurgical procedures and up-to-date equipment to accomplish eye examinations, veterans must be referred to the LSU Medical Center.

Our VA stands at a critical juncture in its ability to meet the future medical care requirements of its veteran constituency. Areas such as oncology, geriatrics, and extended care require increased attention in response to the aging population. In the outpatient area, the current annual workload—it looks like my time——

Senator **Lautenberg**. If you've got a couple sentences, please finish. We don't like to cut you off too much, but——

Dr. **Williams**. Sure.

The AAMC joins over 100 other medical, scientific, and voluntary organizations in supporting recommendations of the Friends of VA. Based on a needs analysis, veterans service organizations produced an independent budget of funding of $13.4 billion for medical, prosthetic, rehabilitation, and health services. To protect the benefits of research and the role research plays in the VA mission, additional appropriations need to be provided.

The AAMC appreciates the opportunity to make this statement.

Senator **Lautenberg**. We thank you very much, Dr. Williams.

It is important to note that we're in the middle of a House/Senate conference for a supplemental appropriation right now. And that conference did approve a $94 million supplemental addition for VA medical care, that's for staff and equipment. And one thing I think that all of us hear is that we're still not providing the adequate funding that's required by an aging population. I can attest to that, si~~nce I'~~m ~~a~~ veteran of World War II, despite the youthful face and all that. [Laughter.]

But the fact is that I see lots of my contemporaries who were the bulk of the people serving in that time having aged, needing care, often not having the resource to go elsewhere. It is very important.

Thank you.

[The statement follows:]

STATEMENT OF DR. DARRYL WILLIAMS

Good morning. I am Dr. Darryl Williams, Dean of the Louisiana State University School of Medicine in Shreveport. On behalf of the University and the Association of American Medical Colleges (AAMC), for whom I am testifying today, I wish to thank the Subcommittee for the opportunity to present our views on the funding needs of the Department of Veterans Affairs (DVA) medical care and research programs.

The AAMC serves as the national voice for the country's 126 medical schools, 92 professional academic societies, and 420 major teaching hospitals, including over 70 VA medical centers. Currently, 139 VA medical facilities are affiliated with 103 of the medical schools, illustrating the strong ties that the AAMC and its member institutions have with the VA. The AAMC understands the importance of the VA's medical care and health research programs to veterans as well as to the overall national health care delivery system.

The basis of VA medical center/medical school affiliation agreements is a model for public-private partnerships. Since the end of World War II medical schools and the VA have enjoyed a mutually beneficial relationship. Such arrangements have improved the quality of care provided to veterans and play a critical role in staffing VAMCs with outstanding health professionals. Nearly half of the nation's medical students spend a portion of their training in the VA system and 12 percent of all medical residency positions in this country are financed by the VA. Many of the physicians trained in the VA spend major portions of their careers in the system. Thus, affiliation agreements serve an indispensable function in recruitment. For example, 66 percent of the recipients of VA Career Development awards remained in the VA beyond ten years. In addition, academic affiliations stimulate the work environment and offer access to individuals and resources which promote high morale and staff retention. Affiliations agreements can be thought of as symbiotic relationships that simultaneously benefit the mission of the VA and the training of the nation's future health care providers.

The AAMC also recognizes the important role the VA plays in the national health care delivery system. As Committee members know, the VA operates 172 medical centers, 231 outpatient clinics, 117 nursing home care units, and 27 domiciliaries, making it the largest health system in the western world. Through this network, the VA provides access to care for millions of veterans in need of medical attention. In an era of rising costs of health care, growing numbers of uninsured Americans, and efforts to shrink the Federal budget deficit, public sector programs face increasing budget pressure and hospitals face increasing amounts of uncompensated care. Thus, the VA's role in providing access to health care has become dramatically more important. This comes at a time when the VA has also faced severe budget shortfalls.

In the immediate past, supplemental appropriations have been approved and creative balancing techniques have been employed to overcome funding shortfalls and enable the VA to meet program responsibilities. Nevertheless, over time fiscal constraints have stretched the VA beyond reasonable limits and forced reorganization, and, in some cases restriction, of services. The results of working with too limited resources have brought into play ethical and moral considerations, such as timeliness and access to care. Insufficient funding impairs the VA's ability to deliver quality health care services and also threatens the success of some affiliation agreements.

I would like to share with you some experiences and observations from the Overton Brooks VAMC with which LSU School of Medicine in Shreveport is affiliated. Please keep in mind that many of my colleagues across the country share similar concerns. While we in academic medicine often refer to support for research and education, the main underlying message relates to patient care. Simply put, VA hospitals suffer from a lack of resources necessary to provide reasonable quality, and sometimes quantity, of care to veterans. For the dean of a medical school this presents a serious two-pronged problem. First, I am concerned about the care veterans receive. Second, I am concerned about the setting where students are educated. In my professional opinion, lack of resources threatens to compromise each of these factors.

The VAMC in Shreveport has effectively served the veteran population in the greater Ark-La-Tex area, composed of Northwest Louisiana, Southwest Arkansas, and East Texas, for the past three decades. In FY-89, our VAMC had 9,630 admissions, among the highest in the entire VA system, as well as more than 112,000 outpatient visits. Of the veterans served, 98.8 percent are considered mandatory (non-discretionary) care. Due to budgetary restraints, we are having increasing difficultly in accomplishing our mission of providing medical care to veterans, educating students (medical, nursing, pharmacist, and medical technologists) and carrying out a clinically relevant research program. Areas of concern range from dollars available to purchase necessary medical equipment to the ability to recruit and retain professional and technical staff.

Problems contributing to staffing difficulties include insufficient competitive salary rates, lack of psychiatrists and radiologists, and too few professional nurses for general ward, intensive care and medical specialty programs. Lack of nurses has caused bed reductions. Lack of sufficient technical staffing has led to delayed diagnostic testing and limited treatment efforts. This has impacted significantly in phlebotomy, EKG, diagnostic ultrasound, irregular hour clinical laboratory testing, and respiratory therapy coverage. The combined effect has been reduced support to attending physicians and house staff. House staff at time have been required to accomplish, among other duties, phlebotomies and EKG coverage.

Lack of funding to support adequately new and replacement equipment has severely hampered the medical center's ability to support development and maintenance of clinical teaching programs. For example, there is an absence of stereotactic equipment for neurosurgical procedures, and of up-to-date equipment to accomplish eye examinations and treatment. Use of old equipment awaiting replacement results in frequent down-time for repairs. The cumulative effect is that patients must be referred to LSU Medical Center in Shreveport or other community facilities for diagnostic and therapeutic procedures. This, in turn, results in increased time and costs to obtain the procedures. Because it is often necessary to provide nurse escort for referred patients, a further dilution of already inadequate nursing staff results.

Without a sufficient operating budget, limits have been placed upon the purchase and/or use of items like oncology drugs, diagnostic services such as MRI, and total hip and knee prostheses. The latter has jeopardized continued accreditation of the orthopedic residency program.

The VAMC stands at a critical juncture in its ability to meet the medical care requirements of its veteran constituency in the future. A major element is its medical school affiliation and associated medical training program. Areas such as oncology, geriatrics and extended care, and substance abuse require increased attention in response to changing medical needs of the aging veteran population. These needs cannot be met in certain areas due to lack of resources.

The medical center is approved for ten intermediate care beds. However, because of continued high demand for acute medical beds, establishing these beds has not been possible. Additional funds would permit expansion of the existing Hospital Based Home Care Program so that patients with long term infections could be cared for in their homes, a better alternative to the hospital. This program to improve care would also make beds available for the hospital to treat more patients.

The demand for outpatient care continues to be of concern. Exam and treatment space in the ambulatory care building is insufficient. The current annual outpatient workload, more than 112,000 visits per year, is being accomplished in an area designed for about 75,000 visits per year. As a result, we encounter significant impediments to efficient traffic flow and utilization of assigned staff, all of which combine to lower morale and overall productivity.

Medical research is another area of concern. This is an important element for both the medical center and the university in regard to recruitment and retention of high quality, academically oriented faculty. Most of the medical center's research core equipment is between 7 and 20 years old. To obtain funds for such equipment, we must apply to the Department's Research Equipment Committee, or use an individual investigator's RAG or Merit Review proposals, both of which are quite competitive. Replacement of the old, outdated equipment would enhance the opportunity to attract well-trained research physicians, and enhance an investigator's ability to compete for research funding.

While we at LSU School of Medicine in Shreveport appreciate our VA affiliations and the role they play as a setting for medical education, we also bring to the VA health care professionals of the very highest caliber. In addition, the University provides more than $1.36 million in support each year to the VA through factors such as subsidization of salaries and patient care programs essential to veterans, but not offered by the VA.

It is paradoxical to note that budget "belt-tightening" is deteriorating the system at the same time as demand is rising. Data show a dramatic trend in the demographics of the veteran population; specifically, the veteran population is aging quickly. As the population ages, they require more care, more complex care, and more costly care. Second, we are entering an era where broad constraints on the nation's health care system have brought many veterans to the VA for care who previously did not rely on the system. The system could face an even more dramatic surge of new patients in the coming year as newly deactivated members of the Armed Services become eligible for VA care. The Administration's budget does not contain resources to address these increasing demands.

I cannot emphasize strongly enough the need to provide an appropriation for VA medical care that precludes the need for mid-year supplemental appropriations. You can well imagine the difficulty of operating any major organization, particularly a hospital, without clear budget forecasting. Funding that arrives late in the year does little to improve our ability to replace staff. Administrators can plan more effectively for patients to be served best with a well-balanced, year-long spending plan.

I urge this Subcommittee to appropriate a level of funding that will satisfy the VA's needs and preclude the necessity of mid-year supplemental funding. The $12.3 billion medical care appropriation contained in President Bush's FY-1991 proposed budget is encouraging. It acknowledges the need for substantially increased funding by providing a $1 billion increase over the FY-1990 appropriation. However, given the demands on and present status of the VA health care system, the President's request will not be sufficient to overcome previous shortfalls and cover the VA's annual payroll-related expenses. Infrastructure decay and increased waits for services will persist. Additionally, staff morale will continue to lag. At a time when professional health providers, particularly nurses and technicians, are in great demand and short supply, morale and funding constraints have thwarted the VA's efforts to recruit and retain committed and high quality professional staff.

Moreover, the President's FY-1991 budget proposes a $14 million (or 7 percent) real cut from the FY-1990 $212 million funding level. This proposal to reduce funding to $198 million ignores the top quality research conducted by the DVA and fails to recognize the critical role the research program plays in recruitment and retention. Such a cut would have a dramatic, adverse impact on a program that involves a relatively small, but highly leveraged amount of money.

The AAMC joins over 100 other medical, scientific, and voluntary health organizations in supporting the recommendations of the "Friends of VA Medical Care and Health Research." The Friends of the VA proposal is a need-based analysis of the DVA's medical care and research accounts. For FY-1991, The Friends of the VA determined, as did the four veterans service organizations that produced the "Independent Budget," that funding of $13.4 billion should be provided for VA medical care.

The $13.4 billion medical care appropriation proposed by the Friends of the VA would enable the VA to fulfill its mandate of providing quality health care to eligible veterans. For instance, funds would be available to fill long-vacant staff positions, depleted supplies would become a thing of the past, and out-dated equipment could be replaced. In addition, $13.4 billion would furnish the VA with some of the resources necessary to begin to adapt to the future needs of veterans. Specifically, excess hospital capacity could be converted to extended care services, more ambulatory services could be opened, and funds would be available for activation of newly-constructed facilities.

This funding level also reflects the costs to the VA for treating AIDS patients. Last year, the VA treated seven percent of all the nation's AIDS patients, at a cost of $130 million. However, the VA was forced to use funds from the general medical care account to pay for AIDS care. The VA will continue to provide care for an increasing number of veterans afflicted with AIDS and ARC. I urge this Subcommittee to allocate to the VA a larger share of the general Federal funds designated for treatment of patients diagnosed with this tragic illness.

For medical, prosthetic, rehabilitation, and health services research, the Friends of the VA recommend a total of $268 million. Between 1981 and 1989, the purchasing power of the VA research appropriation has been cut by nearly half. This cut has resulted in the loss of promising innovations in medicine and health care delivery that could prolong and improve life. Further cuts, as proposed by President Bush's FY-1991 budget would lead to additional lost opportunities. Funding of $252.5 million would bring the VA research program back to the FY-1985 level of effort; an additional $15.5 million would allow the VA to concentrate on special research projects of importance to veterans, including alternatives to nursing home care, nerve regeneration, mental health, and AIDS.

The presence of research dollars offers veterans valuable opportunities to participate in studies that involve the latest medical therapies and technology. The long term benefits of such studies are enjoyed by veterans and the entire population. As I mentioned previously, the importance of research funding on recruitment and retention must not be overlooked. The chance to conduct research in a clinical setting attracts many outstanding physicians to the VA. Thus, research dollars can be described as well-invested dollars that reap considerable returns. To protect the benefits of research and the role research plays in the VA's mission, additional appropriations, well beyond President Bush's FY-1991 budget proposal, need to be provided.

In past years, the VA has been fortunate to receive a significant transfer of funds to the research account from the Department of Defense. I do not want my support for this transfer to be misunderstood. However, I believe it would ensure the future stability and security of the system to receive appropriate funding through its own budget line item, rather than to be forced to continue to rely on the DOD.

The AAMC appreciates this Subcommittee's past and continued efforts to remedy the shortcomings of the Administration's budget requests. In difficult years, including this year, your support has brought the VA badly needed funding increases and extremely critical supplemental appropriations. We appreciate the $94 million in supplemental appropriations approved by this body to satisfy more adequately the current budget shortfall. For FY-1991, I encourage you to evaluate the needs and importance of the VA medical care and research accounts, reconsider the extent of previous funding deficiencies, and increase the appropriation level recommended by the Administration. Again, thank you for the opportunity to testify this afternoon. I will be happy to respond to any questions.

STATEMENT OF DAVID W. GORMAN, ASSISTANT NATIONAL LEGISLATIVE DIRECTOR FOR MEDICAL AFFAIRS, DISABLED AMERICAN VETERANS

Senator LAUTENBERG. Mr. Gorman from DAV?

Mr. GORMAN. Thank you, Mr. Chairman.

As you know, the proposed budget for the VA in fiscal year 1991 amounts to some $30.9 billion, which is nearly $1 billion increase over the fiscal year 1990 levels, $900 million of which is requested strictly for the "Medical care" account.

While we are encouraged by the requested budget, it is important to remember, I think, that all but about $200 million is already spent simply for increased salaries, costs, and inflationary increases also.

MEDICAL CARE FUNDING LEVELS TRACKED

Mr. Chairman, when tracking the VA's medical care funding levels back to 1980, one will see a fairly bleak picture. The 1980 actual budget authority amounted to $5.8 billion. The fiscal year 1991 request of $12.3 billion, deflated to 1980 levels, is only $6.4 billion or an equivalent of some $600 million increase over the last decade for VA health care.

Put another way, Mr. Chairman, from 1985 to 1989, spending for veterans health care increased by 17 percent compared to a 55-percent increase for Medicaid and a 32-percent increase in Medicare funding.

The 1991 request for medical and prosthetic research is $14.1 billion below the 1990 level and a reduction of 421 full-time employees.

Mr. Chairman, not only has VA research made numerous and extraordinary contributions to medicine as a whole in the country, it also serves as a vital and necessary component for recruiting and retaining quality health care professionals. These contributions in VA research are perhaps best measured in the area of prosthetic research.

A number of problems continue to confront the Veterans Benefits Administration which result in untimely and poor quality services provided to disabled veterans in their benefit claims. This is primarily due, Mr. Chairman, to a decade of systematically reduced employee levels.

We believe, however, that a number of events have occurred during this budget process which have been encouraging and have placed the needs of the "General operating expenses" account in a clearer perspective.

What remains to be done now is to quantify those needs in terms of appropriations. In doing so, we believe that your job has been made much easier by the excellent recommendations made by the Veterans Affairs Committees who have demonstrated their usual expertise in analyzing the resource needs in specific areas for which they should be obligated.

Mr. Chairman, in concluding, we would request that you carefully consider the various funding levels as contained and outlined in some detail in the independent budget during your deliberations regarding the need for VA appropriations.

Thank you.

Senator **Lautenberg**. Thank you very much.

[The statement follows:]

Statement of David W. Gorman

Mr. Chairman and members of the committee: On behalf of the more than 1.3 million members of the Disabled American Veterans and its Ladies' Auxiliary, I am pleased to have this opportunity to present our views on the budget request of the Department of Veterans Affairs (VA) for fiscal year 1991.

As you are aware, Mr. Chairman, on behalf of the VA the President is requesting $30.9 billion in budget authority in fiscal year 1991 to administer the various benefit programs and services for this nation's 72.9 million veterans, their family members and survivors of deceased veterans.

This represents an increase in budget authority of $1 billion over the fiscal year 1990 appropriated level. While this budget request will not fully fund the health care needs and benefits delivery system for our nation's veterans, it is a significant improvement over the fiscal year 1990 proposal

VETERANS BENEFITS ADMINISTRATIONS [VBA]

The VA's fiscal year 1991 request for VBA is $605.3 million, an increase of $42.5 million over the fiscal year 1990 appropriated level. The Administration proposes a reduction of 266 VBA FTEE.

Mr. Chairman, the fiscal year 1991 Independent Budget sets forth, in some detail, the problems that continue to confront the VBA, and cost-effective solutions to resolve them. Briefly stated, however, service delivery to our nation's veterans, caused by a decade of inadequate budgetary support, is currently manifested by the following: deterioration in timeliness and quality of claims adjudication; a backlog in compensation and pension claims that has skyrocketed from more than 167,000 in October 1987 to over 650,000 at present; delays of 100 days from date of application until date of interview for those seeking vocational rehabilitation benefits; nearly 1.7 million veterans unable to reach the VA by telephone for benefit information; and unnecessary defaults on home loans by veterans at great cost to them and the government.

To address these problems, Mr. Chairman, the strategy of the Independent Budget is to obtain budgetary support for ADP systems management so that its newly reinvigorated ADP Modernization Program can go forward, with an emphasis on interim measures adaptable to their long-range goal. The key, Mr. Chairman, is to complement this by an infusion of 734 FTEE by a fiscal year 1990 supplemental appropriation. The additional FTEE are needed to first stabilize and then gradually reduce the current unacceptable claims backlog.

COMPENSATION, PENSION AND EDUCATION [CP&E]

The fiscal year 1990 appropriated FTEE level for CP&E service is 3,752. The fiscal year 1991 Administration budget calls for an FTEE level of 3,759, an increase of seven FTEE. Mr. Chairman, past Independent Budgets have described in some detail the appalling state of service delivery to veterans with respect to compensation, pension and education claims. Timeliness and quality of decisions have deteriorated significantly, and a monumental claims backlog currently exists.

These problems are directly attributable to the 39 percent reduction in FTEE that has occurred in CP&E service over the past decade.

Mr. Chairman, the Independent Budget recommends an increase of 365 CP&E FTEE over the fiscal year 1990 appropriated level of 3,752 for a total of 4,117 FTEE.

VETERANS SERVICE DIVISION [VSD]

The fiscal year 1990 appropriated FTEE level for VSD is 2,081. The Administration's fiscal year 1991 budget calls for an FTEE level of 2066, a reduction of 15 FTEE.

Mr. Chairman, the VSD component of VA is the initial (and often the only) point of personal contact between VBA and our nation's veteran community. However, since 1985 a reduction of 342 FTEE has been experienced in VSD.

The Independent Budget recommends appropriations for 195 FTEE over the 1990 appropriated level for a total of 2,276 FTEE.

VOCATIONAL REHABILITATION AND COUNSELING [VR&C]

The fiscal year 1990 appropriated FTEE level for VR&C is 645 FTEE. The Administration's budget request is for an FTEE level of 640, a reduction of five FTEE.

It is unfortunate for both veterans and our nation that this component of VBA is so seriously understaffed, and that veterans must wait 100 days from application until the date they are interviewed by a vocational rehabilitation counselor.

Mr. Chairman the fiscal year 1991 Independent Budget recommends increasing staffing by 69 FTEE over the fiscal year 1990 appropriated level, for a total of 714 FTEE.

LOAN GUARANTY

The fiscal year 1990 appropriated FTEE level for loan guaranty is 2,165. The Administration's budget request proposes 2,165 FTEE for fiscal year 1991.

Mr. Chairman, we find it unconscionable and fiscally irresponsible—in view of the program savings demonstrated by VA's Houston Pilot Project—that the OMB-crafted fiscal year 1991 budget submission recommends no additional FTEE's for loan guaranty. Accordingly, the fiscal year 1991 Independent Budget recommends an increase of 105 FTEE's over the fiscal year 1990 appropriated level for a total of 2,270 FTEE's.

IB VBA RECOMMENDATIONS SUMMARY

Mr. Chairman, the fiscal year 1991 Independent Budget recommends the addition of 734 FTEE's for VBA over the fiscal year 1990 appropriation, to be deployed as follows:

Veterans Services Division	195
Compensation, Pension, and Education	365
Loan Guaranty	105
Voc. Rehab. and Counseling	69
Total	734

MEDICAL CARE

Mr. Chairman, the fiscal year 1991 request for the Veterans Health Services and Research Administration (VHSRA) calls for an overall appropriation request of $12.5 billion—an increase of $890.7 million over the fiscal year 1990 level.

The medical care request of $12.2 billion represents a $901.4 million increase over the fiscal year 1990 level. The proposed medical care budget will support 193,938 FTEE, an increase of 2,837 over the previous fiscal year.

Mr. Chairman, according to the Administration's budget documents which we have been provided, $453.1 million is being requested for payroll increases and $232.3 million is being requested for increased costs due solely to inflationary factors.

Thus, a total of $685.4 million is already planned to be spent for these uncontrollable factors that have little direct bearing on providing enhanced patient care to disabled veterans.

An oversimplified view of this budget request—after accounting for the myriad of increases and decreases in the various programs of VHSRA—leads us to conclude that some $216 million is being requested for the purpose of providing enhanced medical care for disabled veterans.

In our view, Mr. Chairman, this budget, if enacted, will serve to only partially respond to the effects of more than a decade of deficit funding levels for veterans health care needs. Although some—but surely not all—of the damage will be repaired, VA medical care is not yet in a healthy environment.

In this respect, Mr. Chairman, we would further urge you to carefully consider the recommendations and funding levels as contained in the Independent Budget for Veterans Affairs which has been provided to the Committee. This budget document represents the cumulative and cooperative efforts of four major veterans' service organizations (DAV, AMVETS, VFW, and PVA) and represents, in our view, realistic funding levels that would allow the Department to carry out its mandated mission of providing health care services to disabled veterans.

MEDICAL AND PROSTHETIC RESEARCH

Mr. Chairman, the Administration's fiscal year 1991 medical and prosthetic research budget request is $198.5 million, $14.1 million below the fiscal year 1990 funding level with a reduction of 421 FTEE.

The DAV has, and continues to be, fully supportive of the VA's combined research efforts. It is discouraging, therefore, to continue to witness appropriation requests that can only greatly impair the effectiveness of these activities. We believe the Independent Budget's recommended appropriation of $255 million for combined research activities is needed to restore a vitality to VA research activities.

CONSTRUCTION

The Administration's fiscal year 1991 construction request totals $694.5 million. Mr. Chairman, while we support full funding of the VA's request for construction purposes, we are nevertheless concerned that the requested amount will not meet the pressing needs of the health care system.

This concludes our testimony, Mr. Chairman, and I would be pleased to respond to any questions you or other Committee members may have.

STATEMENT OF MR. MAGILL, VETERANS OF FOREIGN WARS

Senator **Lautenberg**. Mr. Magill?

Mr. **Magill**. Thank you for the opportunity to present the views of the Veterans of Foreign Wars.

I would like to open up by saying that we are proud to be a part of the independent agencies budget and we certainly do support the figures that are outlined in that document. Therefore, I won't go into the numbers and things like that, but I would just like to make brief remarks as to the importance of the VA.

The VA is many things to many people. Probably one-half of the doctors that are practicing now had some contact with the VA, whether school, intern, residency; also the research and development impacts on virtually everybody in the United States. So I guess what I'm trying to point out is that VA is not just a veterans group but it's working to serve all the people.

We were very happy to see the increase in health care that was proposed by the President. But I would like to point out, as Mr. Gorman did, that the money is spent even before it is received. I won't go into the details of that, but it's not the windfall that a lot of people think that it is and we would hope that you all would keep that in mind when you are deliberating the appropriations.

This concludes my statement. I'm available for any questions.

Senator **Lautenberg**. Thank you, each one of you, for the shortness of your presentation. The information that you bring is valuable and, again, the full statements are incorporated into the record.

There is a universal thread that weaves through each one of your presentations and that is that more is needed and, you know, the thought, whether it's prosthetic devices or the role that the VA plays in terms of developing a medical infrastructure for our country is very important to just basic care.

STATEMENT OF DR. BARBARA NEEDLEMAN, ON BEHALF OF THE AMERICAN FEDERATION FOR CLINICAL RESEARCH

RESEARCH PROGRAM

Senator **Lautenberg**. Dr. Needleman, we look forward to hearing from you.

Dr. **Needleman**. Thank you, Senator Lautenberg.

I am a staff physician at the Baltimore VA Medical Center. I'm pleased to be here today to express the views of the American Federation of Clinical Research regarding fiscal year 1991 funding for the VA research program.

Since 1985, VA research opportunities have been drastically reduced. The researcher, who had an 80-percent chance of receiving funding just 5 years ago, today has a less than even chance of receiving support.

This situation is unfortunate because an adequately funded research program benefits VA hospitals and the population at large in many ways: it enhances the quality of health services provided, enables the VA to recruit and retain the finest health professionals, allows veterans to participate in research studies of promising new treatments, and often results in innovative strategies for reducing escalating health care costs. And examples are given in the appendix that we supplied.

Frankly, what made the VA an appealing career option for me and many of my colleagues was the opportunity to conduct research. As opportunities for research support have fallen, many VA physicians have begun to leave the VA system to pursue their careers elsewhere. And it has become increasingly difficult for the VA to recruit recently trained physicians. Less money for research means fewer good doctors to provide care for the veterans.

President Bush's fiscal year 1991 budget proposal ignores many of the benefits of VA research and recommends a 7-percent reduction in real dollars compared to the budget for the current year.

While the need to reduce the deficit may have played a role in this decision, it did not stop the President from requesting a 36-percent increase for the space station and a 50-percent increase for the superconducting supercollider.

IMPROVING HEALTH TOP PRIORITY

This is particularly disconcerting given public support for health research efforts. A national survey conducted independently by Market Facts, Inc., at the AFCR's request last February found that when asked to state their No. 1 research objective among five specified goals for science, almost two-thirds, or 59 percent, said improving health was their top priority, while less than 1 in 20 cited space exploration as their top priority.

We hope that the Congress will recognize, better than the President appears to, the merits of priority funding for VA research, both in response to scientific opportunity and taxpayer sentiment.

For fiscal year 1991, the AFCR supports the Friends of VA Medical Care and Health Research Coalition in recommending a VA research budget of $268 million. This 26-percent increase may seem unrealistic in light of current deficit reduction efforts, but we believe that VA research is as worthy of a targeted spending growth as the space station and other priority programs.

Thank you for the opportunity to express these views of the AFCR.

[The statement follows:]

STATEMENT OF DR. BARBARA NEEDLEMAN

My name is Dr. Barbara Needleman and I am a staff physician at the Baltimore VA Medical Center in Maryland. I am pleased to be here today to express the views of the American Federation for Clinical Research regarding FY 1991 funding for the VA research program.

The AFCR is the nation's largest organization of medical investigators. It is comprised of approximately 13,000 physician and non-physician scientists who are engaged in virtually every area of medical research. Our membership includes many distinguished scientists -- among them winners of the Nobel Prize in Medicine. The VA research program is of particular importance to the AFCR, as many of our members are staff physicians who conduct research and provide care to patients in VA hospitals.

Since 1985, VA research opportunities have been drastically reduced. While the VA funded 722 merit review awards in 1985, it expects to fund only 539 this year. Furthermore, the percentage of approved projects that receive funding has dropped dramatically -- from 80% in 1985 to a projected level of 45% in the current fiscal year. In other words, the researcher who had an 80% chance of receiving funding just five years ago, today has a less than even chance of receiving support.

This situation is unfortunate because an adequately-funded research program benefits VA hospitals and the population at large in many ways:

- o The research program and academic affiliation create an intellectually-stimulating environment that fosters good medical care.
- o The opportunity to conduct research enables the VA to recruit and retain outstanding health professionals.

- o Research provides the opportunity for many veterans to participate in research studies of promising new treatments.
- o The research program can uncover strategies for reducing escalating health care costs. (Examples are listed in Appendix 1.)

Frankly, what made the VA an appealing career option for me and many of my colleagues was the opportunity to conduct research. A recent study conducted by the Klemm Analysis Group confirms this impression. Rebecca Klemm, who was responsible for the study, has stated publicly that VA physicians in general reported that research opportunities were the most important factor in adequate recruitment and retention. Consequently, it comes as no surprise that as opportunities for research support have fallen: 1) many VA physicians have begun to pursue careers outside the VA, and 2) it has become increasingly difficult for the VA to recruit newly-trained physicians. As the Senate Veterans Affairs Committee states in its FY 1991 recommendation: the "VA research program . . . is integral to the recruitment and retention of high quality physicians." Less money for research means fewer good doctors to provide care for veterans.

President Bush's FY 1991 budget proposal ignores the many benefits of VA research and recommends 7% less in real dollars than the budget for the current year. The Bush proposal sends a disheartening message to VA physicians about the government's commitment to our research program and its importance to the medical care program. While the need to reduce the deficit may have been a limiting factor, it did not stop the President from requesting a 36% increase for the space station, a 50% increase for the superconducting super collider, and a 100% increase for the R&D efforts of the Department of Energy. We do not intend to question the merits of these programs. However, we do question the astonishingly low priority the President has placed on the extremely productive VA research program. This is particularly disconcerting given public support for health research efforts. A national survey conducted independently by MarketFacts Inc. at the AFCR's request last February (see Appendix 2) found that when asked to state their number-one research objective among five specified goals for science, almost two-thirds (59%) said improving health was their top priority. Furthermore, less than one in twenty (4%) viewed space exploration as their number-one priority and less than one in ten (9%) cited energy research as their top priority. We hope that the Congress will recognize (better than the President appears to) the merits of priority funding for VA research both in response to scientific opportunity and tax-payer sentiment.

Over the past year, we have emphasized the importance of an adequately-funded VA research program at hearings before both the Senate and House Veterans Affairs Committees. We were pleased that for FY 1991, both Committees have recommended a $40 million increase over the President's request for medical research at the VA. We were encouraged by this recommendation, though it does fall somewhat short of what we believe is necessary to adequately fund the research program.

For FY 1991, the AFCR supports the Friends of VA Medical Care and Health Research coalition in recommending a VA research budget of $268 million. This recommended budget would restore the program to its 1985 level of effort and allow for a limited number of special initiatives to address health problems that are particularly acute among the veteran population. Of this amount:

- $252.5 million would provide support for 1,849 projects, twenty-six cooperative studies, and 240 career development awards -- roughly the same numbers funded in 1985; and

- o $15.5 million would provide support for special research initiatives focused on AIDS, nerve regeneration, geriatric evaluation units, and mental illness.

The AFCR believes that a budget of $268 million is essential if the VA research program is to be restored and stabilized and if the current problems of recruitment and retention at VA hospitals are to be overcome. This 26% increase may seem unrealistic in light of current deficit reduction efforts, but we believe that VA research is as worthy of targeted spending growth as the space station and other priority programs. Thank you for the opportunity to express the views of the AFCR.

I would be happy to answer any questions.

Appendix 1

POTENTIAL HUMAN BENEFITS AND HEALTH CARE COST SAVINGS RESULTING FROM VA-SPONSORED RESEARCH

Prevention of Circulatory and Vascular Diseases

The VA is recognized as a pioneer in the development of anti-hypertension drugs, a major factor in the significant decrease in mortality rates for heart disease and stroke between 1968 and 1978. During this period, the number of deaths from heart disease per 100,000 Americans decreased by 10 percent (approximately 95,000 lives spared per year); deaths from stroke declined similarly by 25 percent (65,000 lives spared per year).

Treatment of Enlargement of the Prostate

A VA-sponsored study of veterans with prostate enlargement suggests that a sizeable number can be treated without surgery. Medical follow-up costs are approximately $1,000, compared to costs of approximately $6,500 for surgical procedures. Greater use of non-surgical treatment as recommended by the study can yield the VA savings of approximately $29 million per year and spare many veterans the discomforts and risks of surgery.

Detoxification Treatment for Alcoholics

Over 200,00 veterans suffer from alcohol dependence. A VA-sponsored study has determined that for those who require detoxification, outpatient treatment is as effective as inpatient treatment and costs nearly 90 percent less. Increased use of outpatient treatment for the 52,000 veterans provided such therapy each year will yield annual cost savings of approximately $17 million for the VA alone.

Geriatrics Evaluation Units

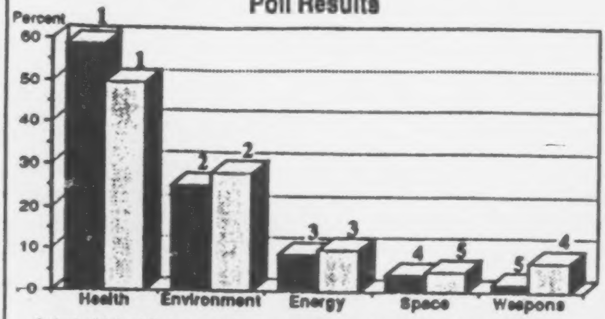
Geriatrics evaluation units (GEUs) are designed to improve hospital care for frail, elderly patients. A VA-sponsored study showed that veterans treated in GEUs to have substantially lower mortality rates and fewer discharges to nursing homes compared to those given standard care. Based on these findings, the VA has established 85 geriatric evaluation units across the country. Use of these units should reduce the number of nursing home admissions by 200,000 per year.

Attachment 2

Public and Congressional Support for Medical Research

When allocating federal funds, the public and members of Congress overwhelmingly support medical research as a "top priority."

Poll Results



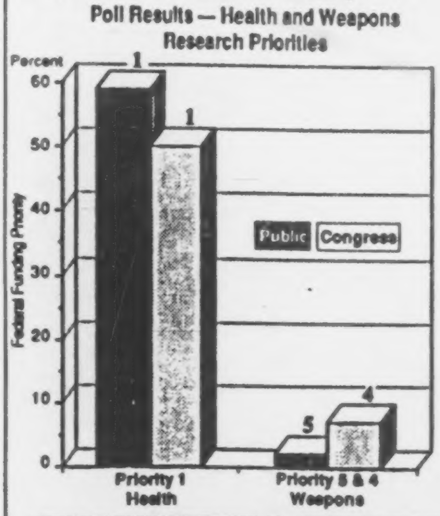
The nationwide public opinion poll of 1,000 adults was conducted February 24-28, 1990 by MarketFacts, Inc., and has a margin of error of plus or minus three percent. The Congressional poll surveyed House and Senate staffs, and was conducted March 6-23, 1990 by the Madison Public Affairs Group. More than 200 Congressional offices responded to the survey.

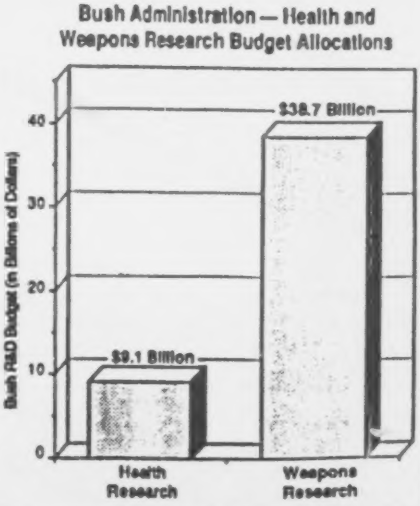
Asked which of five research programs is their "top priority" when allocating federal funding, those surveyed responded as follows:

	Public	Congress
1. Research to improve health care/find cures	59%	50%
2. Environmental research to reduce pollution	25%	28%
3. Research ways to use energy more efficiently	9%	10%
4. Research to advance our space exploration program	4%	5%
5. Research to improve weapons	2%	7%

Bush R&D Budget Priorities Out of Step with Public and Congressional Opinion

Recent polls show that, of five research programs, both the public and members of Congress rank health research as the number one priority in allocating federal funding. Research to improve weapons is a distant fifth priority for the public and a distant fourth priority for Congress. By contrast, the Bush Administration gives top priority to research to improve weapons, based on its proposed FY91 R&D budget allocations for the same five programs.


Poll Results — Health and Weapons Research Priorities


Bush Administration — Health and Weapons Research Budget Allocations

The nationwide public opinion poll of 1,000 adults was conducted February 24-28, 1990 by MarketFacts, Inc., and has a margin of error of plus or minus three percent. The Congressional poll surveyed House and Senate staffs, and was conducted March 6-23, 1990 by the Madison Public Affairs Group. More than 200 Congressional offices responded to the survey.

Senator LAUTENBERG. Thank you very much, Dr. Needleman.

It's interesting that you talk about space. You know, this subcommittee has the appropriations responsibility for the NASA programs as well, and Senator Mikulski, my distinguished colleague, is something of a magician with the way that she's able to balance the various needs of the programs, because she also has housing, as you know, and you don't have to be a housing analyst to see people out on the street and know that very few modest income Americans today can afford decent housing. So that's quite a trick.

And unfortunately the VA programs, which are essential for so many reasons—it was interesting for me to hear you, each of you, talk about the part that veterans medical care plays in the whole, as I use the term, medical or health care infrastructure, because not only does it provide the basis for clinical research, among the other things that your colleagues at the table discussed, we don't often think of it in terms of its role as a whole health care system.

It gets fairly narrowly defined and we talk about it as another veterans program but it's far, far more than that. And it's an obligation that the country has in my view to those who served to be able to provide them with the kind of care that we asked them to provide for their country when they were called upon to do their duty.

So it's tough around here these days, let me tell you, balancing various aspects of our need with the budgetary opportunity; very tough.

I am a very senior member of the subcommittee and I chair the Subcommittee on Transportation. It's hard to say transportation is really important when you talk about someone in a hospital bed or someone needing a prosthetic device. But on the other hand, if we don't take care of our transportation needs, they can't get here from there. And a problem for a lot of veterans, as well, is they can't get to the outpatient clinic and families can't see them when they're in for in-patient services. So all of these things become important.

And I, for one, am very sensitive to these issues, not just because I am a veteran but I come from ordinary, working stock and I know how hard it is for people to make ends meet.

And it is a responsibility—even though I come out of the corporate world here, it's a responsibility that we have. And if one takes it seriously, as each of you does, you're burdened when you can't supply the resources that you truly believe are necessary.

So we thank you for your testimony and, with that, this concludes our public witness hearings.

SUBCOMMITTEE RECESS

The subcommittee will be in recess until May 23 when we're going to take testimony from the FDIC, Federal Deposit Insurance Corporation, and the Resolution Trust Corporation.

Thank you very much for being with us.

[Whereupon, at 12:27 p.m., Thursday, May 17, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

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